A Food Secure World:

Is the United Nation's Food and Agriculture Organisation in a position to provide this Global Public Good?

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Abstract

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The challenges faced by the global food and agriculture system in the twenty-first century are unlikely to be resolved through the implementation of neoliberal policies, most notably promoting market liberalisation, privatisation and financialisation. Many of these policies have also supported industrial agriculture, which has led to the production of many global public bads, such as significant greenhouse gas emissions and water pollution. However, industrial agriculture is not the only method of food production: sustainable agriculture is better placed to provide a wide range of global public goods (GPGs), including environmental protection and rural livelihood development, in addition to sufficient nutritious food. Therefore, there should be a move towards promoting sustainable agriculture with a focus on eradicating hunger and improving food security. The United Nations' Food and Agriculture Organisation (FAO) can play a crucial role in ensuring agriculture provides the GPGs required. FAO also

produces a number of GPGs through its three main roles; measurement, convening and norms and standards setting. This thesis asks if FAO is in a position to provide a food secure world. It also asks if the organisation is in a stronger position to provide the GPGs required following its extensive recent reform. Finally, it asks if a shift in emphasis towards the provision of GPGs will offer an alternative to neoliberalism.

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Introduction:
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Rationale for the study

Hunger has been prevalent in human history for centuries (Fraser and Rimas, 2011). This has not changed, however in the last few decades there has evolved a greater understanding of the challenges faced and an acknowledgement that the present system of food production and distribution has to change (De Schutter, 2014; Tansey and Rajotte, 2008; Weis, 2007). There are still 795 million people undernourished in the world in 2015 (FAO, 2015), despite progress made on the Millennium Development Goals (MDGs). In addition there are many problems associated with micronutrient deficiencies, which affect approximately two billion people in the world, as a result of inadequate diets (WFP, 2015a). This has deadly consequences, for example, zinc deficiency contributes to growth failure and weakened immunity in young children and results in some 800,000 child deaths every year (ibid). Globally poor nutrition causes nearly half (45 percent) of all deaths in children under the age of five; that's approximately 3.1 million children each year; nearly six every minute (WFP, 2015b). This tragedy is taking place every day in a world in which 1.4 billion adults are overweight, including 400 million who are obese (De Schutter, 2014). The problems at both ends of the scale are as a result of inadequate diets, often directly related to poverty.

The reasons for these failings in the food and agriculture system are complex and manifold. At the moment the world produces enough food to feed its population, although population increases will place greater strain on the system; many of the challenges faced can be attributed to the distribution of food and people's ability to access enough nutritious food. The impact of climate change and environmental degradation, especially of scarce fresh water resources, will become increasingly challenging as will competition for fertile land (De Schutter, 2014; Beddington, 2009; FAO, 2011d).

There are many different methods of food production. These fall into two main camps; promotion of industrial agriculture and more sustainable agricultural production, often used by small-scale farmers. Sustainable agriculture is capable of producing not just sufficient amounts of food but also a range of global public goods (GPGs), such as environmental protection, social benefits and rural livelihood development. In contrast, industrial agriculture can produce a wide range of global public bads, such as significant greenhouse gas emissions, water pollution and environmental degradation (De Schutter, 2014; IAASTD, 2009; Wanki, 2011; McKeon, 2013; McMichael, 2013). Industrial agriculture has been largely promoted through the actions of developed countries, most notably the United States (US) and the European Union (EU) as well as other large grain producers such as Canada and Australia, international financial institutions (IFIs) and multinational corporations, as part of wider

neoliberal policies, which have also driven market liberalisation, privatisation and financialisation (Weis, 2007; Clapp, 2006; WDM, 2012; Elliot, 2014).

Operating within the arena of food and agriculture there are many different actors, from states protecting their national interests to international organisations coordinating international responses, and from multinational corporations making large profits to small-scale farmers struggling to feed their own families; all are working within the same arena creating an interconnected network. However, these different actors are always not working together; often their actions are in direct opposition to those of the other actors, driven by very different motives and ideologies. These complex dynamics make any kind of coordination problematic, a challenge faced by any international organisation working within this sphere.

The United Nations' (UN) Food and Agriculture Organisation (FAO) was established at the end of World War Two as part of the creation of the United Nations system. It is the UN's specialised agency with a mandate that covers all aspects of food and agriculture and as such is positioned centrally within the international system. In the seven decades since then it has endeavoured to promote food security, however this central aim has not been achieved. There are many reasons for this failure, many of which are beyond the organisation's control.

FAO does not operate in a vacuum; instead it is positioned within a system that is becoming increasingly globalised and fragmented. This has proved difficult for the organisation with many actors within the system voicing their loss of faith in its ability to fulfil its remit. In 2004 following mounting criticism FAO launched the most extensive independent external evaluation (IEE) in its history; acting upon the hundred-plus recommendations in its report (IEE, 2007) FAO has undergone a root and branch reform designed to equip the organisation for the multiple challenges faced by humanity in the twenty-first century. It is this reform and the organisation's potential to provide GPGs in the future that will be the focus of this thesis.

Outline of the research

The central argument of this thesis is based upon the hypothesis that the challenges faced by the global food and agriculture system in the twenty-first century are unlikely to be resolved through the implementation of neoliberal policies, which include market liberalisation, privatisation and financialisation. Many of these policies have also promoted industrial agriculture, which has led to the production of many global public bads. However, sustainable agriculture is in a position to provide a wide range of global public goods in addition to sufficient nutritious food. Therefore, there should be a move towards promoting sustainable agriculture with a focus on eradicating hunger and improving food security for all. As the central international organisation operating within this arena FAO can play a crucial role in ensuring agriculture provides the GPGs

required. FAO also produces a number of GPGs, which offer assistance in achieving this aim through its three main roles; measurement, convening and norms and standards setting.

This thesis examines the role that FAO plays in the provision of GPGs, which are then used to assist in the organisation's main aim of eliminating hunger, food insecurity and malnutrition (FAO, 2013d). It asks if FAO is in a position to provide a food secure world.

The research was guided by two secondary questions:

- Following the extensive reform of the organisation is FAO now in a stronger position to provide the GPGs required?
- Will a shift in emphasis to the provision of GPGs offer an alternative to neoliberalism?

Chapter overview

To answer these questions the thesis is divided into nine chapters. In the first chapter there is an examination of the food and agriculture system in the twenty-first century, to determine the challenges to food security and the impact of different types of agriculture on food security, as well as economic, social and environmental issues. The hunger challenge is highlighted before analysis of two concepts recognised in international agreements relating to the alleviation of hunger, the right to food and food security. Both are important concepts but

quite distinct and separate. The chapter then considers the interconnected challenges to achieving food security paying particular attention to the liberalisation of markets, the promotion of industrial agriculture over small-scale farming, the issues of land tenure, as well as agriculture's complex relationship with climate change, water and land. This first chapter concludes with an examination of the food price crisis of 2007-2008, its causes, impacts and the way in which it exacerbated existing challenges.

In chapter two examines public goods theory from its inception with the work of Samuelson (1954) to its extension into the global sphere as promoted by Kaul and her colleagues (1999, 2002a, 2005, 2006). GPGs as non-excludable, non-rivalrous, global and intergenerational have the potential to offer a framework through which goods and services can be delivered, including those designed to promote food security. The different aspects of GPGs including the problem of free rising and the balance between public and private are discussed, as are a number of issues associated with the provision of GPGs such as state sovereignty, the weakest link, aggregate efforts, externalities and the principle of additionality. Food security and the MDGs have been examined for their suitability as examples of GPGs. The chapter concludes by charting the changing role of international organisations within the international system.

The third chapter gives a brief overview of the different theories associated with international relations, realism, neo-realism, liberalism, neoliberalism,

constructivism and cognitivism. Four key themes addressed by all six theories; the identity of the main actors, their level of autonomy, the interdependence within the international system and the importance granted to information and its providers, are identified. The chapter then concludes with an examination of the wider international context within which FAO operates, from post-war era of regulated capitalism to the promotion of neoliberalism from the 1980s onwards.
The next two chapters, four and five, give a historical analysis of FAO from its creation in 1945 to the Independent External Evaluation (IEE) in 2007, which led to the reform of FAO.

Chapter four gives a detailed analysis of the discourse of nutrition that emerged in the 1930s and helped inform the foundation of FAO in 1945. It was championed by a group of scientists and academics, the champions of nutrition, who campaigned throughout World War Two to establish an international organisation with a mandate to govern the food and agriculture arena. There is an examination of the organisation's founding principles and its early history up until 1974 and the World Food Conference. Highlighted are a number of proposals put forward by the organisation's first directors general, Boyd Orr, Dodd and Sen and an overview of the challenges faced in its first three decades.

Chapter five continues to chart FAO's history, from the World Food Conference in 1974, to the evaluation of FAO in 2007. The World Food Conference was an

attempt by the international community to address the increasing pressures on the world food system. The chapter starts with an examination of the crisis that led to the conference and the conference's outcomes and their critiques. This is followed by a brief assessment of the impact of the structural adjustment programmes (SAPs) implemented through the IFIs and FAO's response to increasing food insecurity from the 1990s onwards. It concludes by considering the roles of the different actors operating within the international system, which has become increasing fragmented and globalised. States, international organisations, non-governmental organisations (NGOs), private foundations, multinational corporations and farmers are all discussed.

Chapter six examines the reform of FAO following the extensive IEE, which published its report in 2007. It starts by examining the role of the IEE, its findings and recommendations and then how these were implemented through the reform process, which included strengthened global goals and streamlined strategic objectives. The reform process has not been straightforward with concerns expressed by the UK Government, and with strain placed on budgets and human resources. These challenges and the progress made so far have been discussed.

Chapters seven, eight and nine discuss the findings of the research. A selection of GPGs have been examined in relation to the three main roles of FAO: measurement, through data collection, analysis and dissemination; its role as a

convener, bringing together its member states and a wide range of non-state actors to debate issues and form agreements; and its normative function through norms and standards setting. These roles were chosen as they have been at the core of FAO's work since its creation in 1945 and will always form part of its remit. They also qualify as GPGs as they are non-excludable, non-rivalrous, global and intergenerational.

FAO's measurement role has been discussed in chapter seven, through an analysis of its provision of statistics and publications and the potential impact that the reform of FAO has had in this provision and its potential as a GPG in the future. In chapter eight FAO's role as a convener has been discussed in relation to its work through the Committee on World Food Security (CFS) and the promotion of civil society participation in the negotiation process. Finally in chapter nine the FAO's role as a norms and standards setter is also assessed in relation to international treaties, the MDG framework and the development of the sustainable development goals (SDGs) as well as its standards work.

Theoretical framework

This research has been informed by four main bodies of literature; food security, global public goods, regime theory and neoliberalism. There is a large body of work focussed on the many different aspects of food security, food and agriculture and the associated challenges, such as climate change. De Schutter (2010, 2013, 2014), the former special rapporteur on the right to food has written extensively on the challenges to food security, as have authors including

Clapp (2006, 2011; Clapp and Murphy 2013) and Murphy (2013; Murphy, et al 2012). These are in addition to the extensive body of research produced by international organisations, including FAO, as well as individual states. By examining the different aspects of the food and agriculture arena it was then possible to ascertain the most suitable theoretical framework for its analysis.

Regime theory provided a basis for the initial examination of the ways in which international organisations operate within the international arena. Through the different strands of regime theory; realism (Mearscheimer, 2001), neo-realism (Waltz, 1979, 1993), liberalism (Doyle, 1983; Fischer, 2000), neoliberalism (Keohane, 1984, 1994, 1998, 2005), constructivism (Wendt, 1992; Finnemore, 1996) and cognitivism (Haas, 1992, 1993) it was possible to draw out four key themes addressed by them all. This in turn helped to inform the decision to critique neoliberalism as an economic, social and political system (Harvey, 2005; Chomsky, 1999; Stiglitz, 2002).

Global public goods theory has been chosen as a potential alternative to the dominant neoliberal policies promoted by many in the international arena. The work of Kaul and her colleagues (Kaul et al, 2002a, 2005, 2006) and the International Task Force on Global Public Goods (2006) as well as the early theorists of public good theory Samuelson (1954) and Olson (1971) have informed this decision. Sandler (1999, 2001, 2009) has extended GPG theory by examining the intergenerational aspects and its suitability to address climate

change issues and Cooper, Hart and Baldock (2009) have investigated the provision of GPGs through agriculture in the EU. However, the suitability of GPGs to address the goods and services provided by FAO in its work to address global food insecurity has not been addressed.

Methodology

This study aims to contribute to the debate by deepening understandings of the complexity and diversity of the challenges facing the actors within the international food and agriculture arena attempting to address the multifaceted challenges of food insecurity. FAO, as the central international organisation operating in this arena, was the obvious candidate for investigation.

Data was gathered through twelve elite semi-structured interviews with people working for FAO, many at a senior level in the organisation, or within the food and agriculture arena. The interviews followed two week-long observation sessions at FAO during the Committee for World Food Security's (CFS) annual meetings, which were instrumental in informing the research project's focus.

The interviews took place during June 2013 at FAO headquarters in Rome. Sampling methods included snowballing, purposive and convenience approaches. A number of the interviewees were targeted specifically, including Erwin Northoff, Nick Rubery and Andrew MacMillan as they played crucial roles within FAO or had a unique insight into the organisation, whilst other

interviewees were recommended to the author as potentially valuable sources by interviewees during earlier interviews. This was the case with Josef Schmidhuber, Tina Farmer and Michael Clark. The sampling of interviewees was not representative but instead informed by the exploratory nature of the research project.

The interview period followed two week-long observation sessions at FAO, during the annual CFS meetings, which are detailed below. It was during the observation sessions that a clearer understanding was gained of the organisational structure of FAO and the reform process taking place. Informed by this insight the interviewees were chosen because of their relevance in the overall governance structure of FAO, to its provision of GPGs within its three main roles, or due to their direct involvement in the reform of the organisation.

During the interviews each interviewee was asked about the GPGs provided by their own department and FAO as a whole. Questions were also asked about the reform process and the impact that this would have on FAO's ability to provide GPGs in the future and the organisation's work towards creating a food secure world. As the interviews were semi-structured they followed the same pattern but did not follow a rigid set of questions. This allowed for flexibility for the author to respond to the new information as it was being gathered and for subsequent interviews. Shorthand notes were taken throughout all interviews.

These notes were then transcribed by the author and this data used to inform the research process.

References for each source are indicated in the text and are listed in appendix one. All respondents were happy to be named in the research and were generous with their time.

In addition to the interviews, the author attended the CFS annual meetings at FAO headquarters in October 2011 and October 2012. Throughout this period the author attended plenary sessions, working groups, Civil Society Mechanism (CSM) meetings and side events, as well as conducting informal interviews with participants. Shorthand notes were taken throughout the observation sessions, which were then partially transcribed and used to inform the focus of the research project. These two periods of observation also played a crucial role in the selection of potential interviewees.

Observations took place during a time of dynamic transition with many more participants actively engaging with the negotiation process than ever before. It was clear to the author during these sessions that FAO was in the midst of a major reform process and that this placed the author in a strong position from which to observe the process and some of the outcomes. However, it has to be noted that at the end of the data gathering period the reform process was still in

progress and so the final outcomes were not available for analysis. It will take many years for the final outcome of the reform process to be known.

During the three data gathering visits to FAO headquarters in Rome the author also examined a number of primary source documents, many relating to the organisation's early history, in FAO's library. A wide range of additional primary sources were also used including statements and resolutions from the UN, FAO documents outlining policy and other official sources. The final primary data collection period ended in June 2013. An extensive review of secondary sources has also helped inform this research, including theoretical analysis from academic books and articles, surveys, working papers, reports and news commentary. This secondary data collection period extended until the summer of 2015.

The research would have benefited from a larger number of elite semi-structured interviews, from across all FAO's departments. This would have allowed for a more representative view of the GPGs provided by the organisation and a more in-depth understanding of the reform process. However, this scale of investigation was beyond the scope of this research project. In addition, an interview with the new director general, Jose Graziano da Silva, would have been very informative. Although the author did make enquiries about a possible interview the director general, understandably, did not have time to see the author, and so his views have been taken from

secondary sources, such as statements to FAO and the UN, press interviews and speeches. Additionally, the data gathering during the observation sessions was limited to the number of meetings the author was able to attend as many meetings were held concurrently. However, the author did acquaint herself with the documentation resulting from the meetings not attended.

The flexible design of this research project has proved very useful, allowing for a flexible approach to the qualitative primary data collection through the semi-structured interviews. This gave the author the opportunity to adapt the interviews throughout the data gathering stages as new information became available. This added nuances to the overall understanding of the complexity within this arena and assisted triangulation.

At the time that the interviews were conducted in June 2013 the new director general was just about to present his programme for change to the FAO Conference. The interviews reflect a sense of uncertainty, of change but overall a sense of optimism.

Research ethics

Permission to attend CFS meetings as an observer, to visit FAO's library and to access interviewees was gained through liaison between the University of Bradford and FAO. The author's supervisor, Professor Paul Rogers, supplied a letter of introduction, which proved the author's academic credentials. FAO and

individual interviewees were made aware of the nature of the research project and were happy to grant access and to participate, respectively. Following the interviews the author continued to liaise with the interviewees and once all interviews had been transcribed each interviewee was contacted again and asked if they would wish to see the transcription of their interview. Three asked to see the transcriptions and subsequently gave their permission for the information to be used.

The author did not experience any ethical challenges during this research project. Permission to access FAO was granted for three separate data collecting periods and all interviewees were happy to participate and to be named.

Scope of the research

The scope of this research is wide, with an overview of the global food security situation in the present day, a historical analysis of FAO and the international arena and economic landscape within which it operates, as well as an examination of a range of GPGs that it provides through its three main roles. By taking this historical analysis approach an understanding of the position of FAO within the international arena has been gained, as well as an appreciation of the GPGs that it provides.

However, there are a number of areas that are beyond the remit of this research. It has to be acknowledged that there are many different types of food producers, including those who rely on fishing in all its forms, to provide food. These are not included in this thesis instead it concentrates on agriculture as a means of food production.

There are many challenges to the provision of a food secure world and although a number of these are examined in the first chapter it is not possible to investigate them all. Therefore among the factors not discussed, despite their considerable impact, are the world's increasing population, changing food consumption habits, food waste, intellectual property rights and the gendered dynamics of agricultural production. In addition the important role of FAO as a provider of technical assistance has not been addressed as this occurs at the local or national level and is therefore not a GPG.

The reform process is still in progress and it will be many years before it will be possible to gauge its success. It would be worthwhile revisiting this research area to investigate the reform's impact, not only on FAO but also its partners, especially those working through the CFS in their attempt to make global negotiations more inclusive and representative of the people affected by policy decisions. The GPGs highlighted through this research are only a sample of the GPGs that the organisation provides. A wider study of these GPGs and their

impact on food security would be an interesting avenue to examine in more depth.

Contribution of the research

Although the theory of GPGs has been used as a tool of analysis for issues relating to a number of different areas, such as the environment (Sandler, 2001, 2009; International Task Force on Global Public Goods, 2006) it has not been used to examine the provision of food security, and very little on the associated global public goods or bads that can result from the different types of agriculture (Cooper, Hart and Baldock, 2009). Industrial agriculture, as promoted through neoliberal policies, can produce a number of global public bads; a situation that needs to be addressed if food security for all is to be achieved without causing detrimental and irreversible damage to the environment. This thesis has set out to determine whether the provision of GPGs aimed at alleviating food insecurity can offer an alternative to neoliberalism and as such contributes to the existing literature concerned with both the provision of GPGs and food security.

Additionally, although the history of FAO has been well documented, especially in its foundational years (Abbott, 1992; Black, 1943; Boudreau, 1943; Boyd Orr, 1949, 1966; Evan, 1943; Staples, 2006; Shaw, 2007) the recent reform of FAO offers an opportunity to examine the organisation during a time of extensive change; the most significant change in the organisations' history since its creation seven decades ago. This moment in time also provides the perfect

opportunity to gauge its future potential in relation to its GPG provision taking into consideration its revised global goals and streamlined strategic objectives.

This research makes a distinct contribution through its in-depth analysis of FAO's reform process and an analysis of the GPGs that FAO provides; these areas have not investigated before. By connecting FAO's reform with its GPG provision it may be possible to make the case for a shift towards a GPG approach, which takes a more holistic approach to the provision of food security, and away from the narrow market-driven neoliberal approach.

Chapter One:
Food Security in the 21st Century

Introduction

Food is essential for life; without enough nutritious and nourishing food people cannot reach their full potential and in extreme cases of deprivation will die from starvation. This is an undisputed fact. However, from this central fact there are disagreements on every aspect of the food chain, from how and where it is produced, by whom and for whom, to its environmental impact. Despite these disagreements there is consensus on the need for action to address the problem of hunger.

This chapter will start by highlighting the hunger challenge before examining the emergence of two concepts recognised in international agreements in relation to the alleviation of hunger; food security and the right to food. Both play a central role in a number of international agreements but they are distinct and separate. It will then consider the interlinked challenges to achieving food security in the twenty-first century, looking in particular at the liberalisation of markets, the promotion of industrial agricultural production techniques over small-scale traditional farming methods and issues of land tenure, as well as agriculture's complex relationship with climate change, water and energy. And finally there will be an examination of the food price crisis of 2007-2008, its causes, impacts and the way in which it exacerbated existing challenges.

All these issues are significant areas of study in their own right. However in this thesis it is not possible to examine each in detail. Therefore a brief overview of the main points of each issue will be given to act as background information for the main points of the argument to be developed later. These areas have been selected in particular as they are relevant to the provision of global public goods, which will be examined in more detail in later chapters. The reasons for food insecurity are complex and wide-ranging; those to be discussed here are only some of the contributing factors.

Among other factors that will not be discussed here despite their considerable impact, are the world's increasing population, changing food consumption habits, food waste, intellectual property rights and the gendered dynamics of agricultural production. It also has to be acknowledged that agriculture is only one method of food production, with fisheries and forests also playing vital roles in the provision of food. These will not be discussed in this thesis but both offer excellent avenues for further research in regards to the provision of GPGs.

The Hunger Challenge

In recent years there has been some progress made on reducing the number of undernourished, from one billion in 1990-1992 to 795 million in 2015. This year marks the end of the monitoring period for the Millennium Development Goals (MDGs), in which states made a commitment to halve the proportion of

undernourished from 1990 levels.[1] The proportion of undernourished people in the total population has decreased from 23.3 percent to 12.9 percent in the developing regions as a whole but this overall figure does not reveal the uneven nature of the progress with some regions doing much better than others. Out of the 129 developing countries monitored 79 achieved the MDG target. (FAO, IFAD and WFP, 2015c)

However, these figures are only based on calorie intake, and one which assumes a sedentary lifestyle, which is not the case for many working people. Olivier De Schutter (2014) argues that calorie intake alone is not a useful guide; investigating levels of nutrition gives a better account. Diets that have sufficient food intake can still be deficient in micronutrients, such as iodine, vitamins or iron. De Schutter (2014, p.4) highlights the fact that "Too little has been done to ensure adequate nutrition, despite the proven long-term impacts of adequate nutrition during pregnancy and before a child's second birthday."

Micronutrient deficiencies affect approximately two billion people in the world, a result of inadequate diets. This has tragic consequences, for example, zinc deficiency contributes to growth failure and weakened immunity in young children and results in some 800,000 child deaths each year. (WFP, 2015a) Inappropriate or inadequate diets, often a result of poverty, also account for the large number of people who are overweight or obese. Between 1980 and 2008

[1] The Millennium Development Goals will be discussed in more detail in chapter 8.

the prevalence of obesity doubled to 1.4 billion adults being overweight, including 400 million who were obese. This is in addition to the estimated 43 million children who are overweight. (De Schutter, 2014; Scaling Up Nutrition, 2015; Belhassen, 2015) Globally poor nutrition causes nearly half (45 percent) of all deaths in children under the age of five; that's 3.1 million children each year; approximately 8,493 deaths a day; 354 an hour and nearly six every minute. (WFP, 2015b)

Malnutrition has lifelong and devastating consequences. There are 165 million children in the world who are stunted and too short for their age. This will impact on their health, educational attainment and future earnings; it will prevent them reaching their full physical and cognitive potential and in the wider society it will restrict economic development. (Scaling Up Nutrition, 2015) The 'hidden hunger' has now been recognised and there are a number of projects, such as the multilateral Scaling Up Nutrition initiative, now working to address these issues. There is a focus on the first 1,000 days of a child's life, throughout gestation and up to their second birthday. Ensuring a well-balanced diet at this stage of life can have a significant impact on a person's future health and well-being.

The Right to Food and Food Security

The Right to Food

The Right to Food is recognised in a range of human rights legal frameworks including the Universal Declaration of Human Rights (United Nations, 1948) in which Article 11 (1) declares that States Parties "recognise the right of everyone to an adequate standard of living for himself and his family including adequate food".[2]

The Universal Declaration of Human Rights was created soon after World War Two, at a time that also saw the establishment of the United Nations and many of its specialised agencies, including the Food and Agriculture Organisation (FAO), as discussed in chapter four. This surge in international activity and institution building, in the aftermath of war, was an attempt to generate coordinated action to assist the millions of people in desperate need around the world.

[2] States Parties: recognising the fundamental right of everyone to be free from hunger, shall take individually and through international co-operation, the measures, including specific programmes, which are needed: (a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources; (b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need. (United Nations, 1948)

Many of the founding principles of these organisations and international conventions can trace their origins back to President Roosevelt's State of the Union Speech in 1941, in which he called for freedom from fear and freedom from want. These ideals were then incorporated into the Atlantic Charter (1941) signed by Roosevelt and Churchill.

The right to food, as a human right, has reappeared in international conventions throughout the decades. For example the Convention on the Rights of the Child (1989, Art 24) states that "States Parties recognise the right of the child to the enjoyment of the highest attainable standard of health" and that States Parties would strive to ensure appropriate measures are taken to "combat disease and malnutrition...and through the provision of nutritious foods and clean drinking water".

FAO director general B. R. Sen was instrumental in promoting the right to food as part of his Freedom From Hunger Campaign, which reached its zenith at the World Food Congress in 1963, designed to be a showcase for FAO's new approach to agricultural development. As part of this drive Sen convened a Special Assembly on Man's Right to Freedom from Hunger, reconnecting with the founding principles of the organisation (FAO, 1963). In 1974 the World Food Conference also reiterated the right to food, in the resolution agreed by the conference (UN, 1975, p1)

> *Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties. Society today already possesses sufficient resources, organisational ability and technology and hence the competence to achieve this objective.*

In 1996 at the World Food Summit (FAO, 1996) in Rome the heads of state and government reaffirmed "the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger." This was based on the proclamation made at the World Food Conference in 1974, which will be discussed in more detail in chapter four.

The international community has taken a number of approaches to addressing the hunger challenge, one of which was establishing a commitment to halve between 1990 and 2015 the number of undernourished people by 2015 (FAO, 1996). This commitment was later revised to halving the proportion of people who suffer from hunger, through its incorporation into the first MDG (United Nations, 2000). The UN, its member states and many non-state actors are now in the process of finalising the aims and objectives of the next round of development goals, the Sustainable Development Goals (SDGs), which will be discussed in more detail in chapter eight.

United Nations Special Rapporteur on the Right to Food

In addition to these reaffirmations and MDG commitments the Human Rights Council of the United Nations appointed a Special Rapporteur on the Right to Food in 2000. The position was held by Professor Jean Zeigler until 2008 and then Professor Olivier De Schutter until 2014. The current Special Rapporteur is Ms Hilal Elver. The mandate of the Special Rapporteur (UN Human Rights Office, 2015) encompasses a wide range of elements that include the promotion of the right to food at every level of governance from national to international.

The rapporteur's mandate is wide ranging as are the issues covered, which include agriculture, children, the contribution of food aid, climate change, extraterritorial obligations, fisheries, indigenous people, nutrition, land, intellectual property rights, the contribution of the private sector, trade and water, all considered in relation with the right to food.

By taking a rights-based approach the special rapporteur has been able to highlight the many different issues that relate directly to the individual's ability to realise their right to adequate food. This is not interpreted in the narrow or restrictive sense which equates the term with a minimum package of calories, proteins and other specific nutrients; instead it is a more holistic view, which takes into consideration the inherent complexities of food production, distribution and consumption.

Olivier De Schutter (2014, 2013) has argued that the right to food is not just about production but instead the focus should be on promoting permanent and secure access to diets that are nutritionally adequate and culturally appropriate and which have been sustainably produced, with reference to the requirements of availability, accessibility, adequacy and sustainability. This could be achieved through three channels; by enabling systems of self production, creating greater access to income-generating activities and having better social protection. As such the right to food is closely related to the right to access to resources such as land, water and seeds.

The special rapporteur also worked with FAO's intergovernmental working group established at the World Food Summit 2002. After two years of intense and constructive negotiations with representatives of different stakeholder groups including civil society the Voluntary Guidelines to support the progressive realisation of the right to adequate food in the context of national food security, known as the Right to Food Guidelines, were adopted by member states of FAO on 23 November 2004. (FAO, 2005b) The guidelines are based on the four pillars of food security: availability, stability of supply, access and utilization. They take into consideration the commitments and legal obligations already in place but do not alter or add to them. Instead their aim is to guide states in the implementation of policies to achieve national food security.

Food Security

Although the right to food and the concept of food security appear in the same international agreements they are two separate and distinct terms. It also has to be acknowledged that the concept of food security is wide-ranging and contested (Sneyd, 2014; Midgley, 2013). David Nally (2013, p.343) argues that the term food security is used to invoke debates on everything from famine relief to future climate change and in the process is "commonly presented as an ideologically neutral concept, a pre-political idea that is moreover a global good." He disputes this claim, instead arguing that the term food security is being used to justify large scale land acquisitions and is therefore being used politically to 'defend the indefensible'.

Jane Midgley (2013, p.427) argues that the term's only constant is its continuing "aspirational and strategic presence in policy and political debate." With over 200 definitions of food security, Midgley states (2013, p.427) that there are many disparate characteristics now associated with the term, including:

> *issues of hunger, poverty, social assistance/safety nets, food safety, public health, nutrition, human right to food, human security, sustainability, improved crop yields, genetically modified foods, and agri-industry advancements, intellectual property rights, land rights, rural development – and its application to different scales of social organisation and governance, it is unsurprising*

that a chaotic, contested and inconsistent concept has been created.

However, Midgley argues that this all encompassing range has contributed to the concept of food security becoming a powerful organising tool to unify different groups and interests.

Given that there are so many different definitions of food security it is necessary to select the most appropriate. This thesis will examine the work of FAO, and the Committee on World Food Security (CFS), therefore that committee's definition is an appropriate starting point for discussion. According to the CFS (2015c), "Food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." Although this definition is inclusive in regards to those that consume food it does not give everyone the right to food, which is a legally recognised right within the international human rights framework. Kerstin Mechlem (2004, p.631) argues that the right to food "must be seen as a wider, more encompassing, and distinct objective in itself" and it "complements food security considerations with dignity, rights acknowledgement, transparency, accountability and empowerment concerns".

Food security also does not take into consideration the wider aspects of food, the ways in which it is produced and how this impacts upon people and the environment. There is a movement, driven by civil society organisations (CSOs), most notably La Via Campesina and non-governmental organisations (NGOs), which aims to have the concept of food sovereignty recognised in FAO and throughout the UN, in place of food security. Global Justice Now (formerly the World Development Movement) argues that food sovereignty offers a critical alternative to the concept of food security, which recognises that not all ways of attaining food security are equal. People's right to choose what they eat, how it is produced and the relationships this entails are critical. "Food sovereignty looks at the political and economic power imbalances inherent in the global food system and challenges who controls how food is produced and distributed." In addition it also "seeks to tackle some of the root causes which lead to hunger and poverty in a holistic way that avoids creating further problems." (WDM, 2012, p.2)

Although the author recognises the merits of the term food sovereignty, which is more in line with the proposals put forward by the special rapporteur and offers a more holistic approach to the challenges of food insecurity, this thesis will continue to use the term food security as this is the term used by FAO and in the international agreements to be discussed here.

The concept of food security is also younger than that of the right to food, only appearing in the 1970s as part of the UN discourse surrounding the 1974 World Food Conference, as previously mentioned and which will be examined in more detail in chapter five. As the conference was a response to low levels of cereal stocks and high cereal prices there was a perception that the world was moving towards a situation of overall food shortages. Increased food production, a solution required by necessity at the end of World War Two, again appeared to be the solution required again.

However, increased production is not necessarily the only answer to the complex challenges of food insecurity. At the time Nobel economist Amartya Sen (1980, 1981, 1986, 1989) moved the debate from one based solely on food production to one of access in his 'entitlements' approach. He argued that acquirement was central to questions of hunger and starvation in the modern world, in which people could starve in a world of plenty, and even in a country in which food is available for those with purchasing power. In his examination of famines (1980) Sen investigates the cause of famines, asking if there is the possibility of famine when there is no substantial decline in food availability per head, the existence of food exports when people are starving at home and the distinction between famine and starvation, the former being the "result of some kind of 'natural' occurrence involving genuine food shortage while the latter is the result of some deliberate action in starving people to death or to migrate." (Sen, 1980, p.614)

He challenged the Food Availability Decline (FAD) theory used to explain the cause of famines and instead puts forward his 'entitlements approach', which "sees starvation as arising from failure on the part of groups of people to establish entitlement over a requisite amount of food." (Sen, 1980, p.615) This entitlement, which can include an individual's ability to produce his or her own food or exchange labour for wages, is constrained through a number of relationships between the individual and the legal and political systems, economic forces as well as social and cultural influences. External factors, many beyond the individual's control, can negatively impact upon his or her ability to exchange labour for wages and then wages for food. For example, a fall in wages, rise in food prices or a drop in the price of the commodity she is selling will all have consequences.

Sen argues (1986, p.6) that by concentrating on the availability of food, in what he terms 'Malthusian optimism' and not people's ability to access it has contributed substantially to delays in policy response and "has been indirectly involved in millions of deaths, which have resulted from inaction and misdirection of public policy."

Having the ability to access food and 'entitlements' has been part of the food security discourse for decades, nevertheless there has been a continuing drive to increase food production almost at the expense of all other considerations.

This increased production model has exacerbated the inequalities within the food system and ignores the need for reform. This can be seen in the neoliberal market based strategies employed as part of the structural adjustment programmes of the 1980s and into the 1990s. These policies will be examined in more detail in chapter five however their consequences will be discussed here.

Market Liberalisation

There have been many different stages in agricultural development since the end of World War Two. These will be discussed in more detail in chapters four and five. However a brief overview here will be beneficial to give context to the challenges to food security.

During the 1960s and 1970s many states, most notably in sub-Saharan Africa (SSA), implemented pro-urban policies that were designed to feed growing urban populations, and through which farmers faced high rates of both explicit and implicit agricultural taxation (World Bank, 1997). This accelerated rural to urban migration and significantly reduced agricultural output. The World Bank (1981) highlighted the trends in agricultural development between 1960 and 1980 in SSA, namely the decline in agricultural production per capita in the 1970s, the stagnation of agricultural exports, an increase of commercial imports of food grain and a shift of consumption to wheat and rice. It accredited these changes in agricultural output to wars and civil strife, drought and poor rainfall,

rapid population growth, neglect of agriculture by governments and donors and a misallocation of investment, most notably into large-scale government operated schemes. The challenges faced in agriculture were exacerbated by the wider financial crisis of the early 1980s, described by Watkins (1995, pp.73-74): "The slowdown in the world economy and the lethal interaction of falling commodity prices and rising interest rates, caused by changes in US monetary policy, devastated one economy after another."

To combat this crisis the Structural Adjustment Programmes (SAPs) were introduced through the lending mechanisms of the international financial institutions (IFIs), most notably the World Bank and the International Monetary Fund (IMF) (Fraser, 2005; Harvey, 2005). Structural adjustment included a wide range of policy reforms designed to reduce fiscal deficits and restore balance of payments; these took different forms in different areas. However, Watkins (1995) argues that although a response was needed to address the severe financial crisis of the early 1980s SAPs had been put forward as the only available option; there was no alternative.

According to Thandika Mkandawire and Charles Soludo (1999) structural adjustment in the 1980s was just one phase of planning to be imposed on African countries. This was preceded by 'development planning' in the 1960s and 'basic needs' in the 1970s and followed by 'good governance' in the 1990s. Mkandawire and Soludo argue that when each new policy regime failed to

produce the desired results the Africans were blamed and new policies implemented. The authors (1999, p.37) argue that “Africa’s problem has not been its failure to learn but it’s learning too well from all and sundry.”

The SAPs, which were replaced from 1999 by the Poverty Reduction Strategy Papers (PRSPs), resulted in the retreat of the state from agricultural development and a reduction in state funding for the sector. It was assumed that through market liberalisation the private sector would fill the funding void vacated by the state. This did not happen. (De Schutter, 2014)

The former special rapporteur on the right to food De Schutter argues (2014) that these policies had a number of consequences, such as placing downward pressure on global agricultural prices as highly subsidized farming sectors in developed countries, especially the US and EU, created incentives for overproduction of certain commodities. These conditions made private investment in agriculture in developing countries unattractive. Small-scale farming became untenable or extremely difficult; more people moved to the cities to find work and the remaining farmers became increasingly impoverished.

Additionally, in order to repay foreign loans in hard currency developing countries grew and exported a narrow range of primary agricultural products for the developed countries at the expense of local food production. This made them more vulnerable to external market shocks and fluctuations and also made

it necessary to import food to feed their own populations. These conditions created an unbalanced food system. (Weis, 2007; De Schutter, 2014)

The case of Mexico is just one example, from many, that demonstrates the impact of trade liberalisation, argues Tony Weis (2007). Through liberalisation import tariffs and quotas were cut and policies put in place favouring export growth. As commercialised farmers benefited from the growth in demand for luxury out-of-season fruit and vegetables, such as tomatoes, fewer basic crops were grown for home consumption and so food imports increased, especially following the signing of NAFTA (North American Free Trade Agreement) in 1994. Weis argues that this had serious consequences for small-scale farming as state support for agriculture ended and privatization of the once protected communal *ejidos* was permitted through a constitutional amendment; a requirement of NAFTA. Trade liberalisation had enhanced openness to imports whilst reducing domestic price supports for farmers.

With the significant increase in agro-imports, such as the tripling of imported maize, Mexico moved from a position of having an agricultural trade surplus to one with “a sizeable deficit, maize prices collapsed amid the flood of cheap, highly subsidized US imports”. This had a significant and devastating impact on the country’s food producers with “more than one million people were squeezed out of agriculture.” (Weis, 2007, p.111) This model has been replicated across the world causing hardship for small-scale farmers, driving rural to urban

migration and devaluing domestic food production systems, as well as eroding food security, especially for the rural poor.

Multilateral Trade Agreements

Mexico was seen as a test subject regarding the outcomes of multilateral trade discipline. Although international trade had been regulated through the multilateral trade agreement GATT (General Agreement on Tariffs and Trade) since 1947 agriculture had been treated as a special case and not subjected to the same overall control. However, that changed when GATT was replaced by the World Trade Organisation (WTO) in 1994 with the signing of the Uruguay Round Agreements.

The GATT agreements form part of the WTO agreements but these now include additions, such as the Agreement on Agriculture (WTO-AoA), which, according to the WTO (2015a) is designed to address the loopholes contained in the original GATT. “The Uruguay Round produced the first multilateral agreement dedicated to the sector. It was a significant first step towards order, fair competition and a less distorted sector.” The aim is to improve predictability and security for importing and exporting countries with the new rules applying to market access, domestic support and export subsidies. Arguably there is some flexibility, however limited, as the WTO states: “The agreement does allow governments to support their rural economies but preferably through policies that cause less distortion to trade.” (WTO, 2015a)

Developing countries were disappointed by the results of the Uruguay Round, which continued to favour the developed countries' agricultural production. Despite the free trade rhetoric subsidies in OECD countries continued to distort the international market. From 1986 to 1988 agricultural subsidies in OECD countries totalled US$ 271.2 billion; this actually increased to US$ 330.6 billion in the years from 1998 to 2000, after the introduction of the AoA as 60 percent of agricultural subsidies had been re-categorised under the tariff box system. Many subsidies had been moved from the Amber Box to the Blue Box or Green Box categories. (Clapp, 2006) Under the AoA system subsidies were permitted for agriculture that had limited trade distortion, as categorised in the Green Box, or its production was limited, as permitted in the Blue Box; subsidies in the Amber Box, which were seen as distorting trade, were to be phased out. These exceptions had been agreed through a bilateral agreement between the EU and US, known as the Blair House Accord (Clapp, 2006; WTO, 2000; Dunkley, 2000).

The subsidies were just one part of the unfair trading system. In addition, tariffs were also in place on products exported from developing countries to developed countries, including tariffs on groundnuts, sugar and some meats, which in some cases were up to 500 percent. Clapp (2006, p.7) argues that "The result is that developing countries are left much more vulnerable. Rather than level the playing field, the AoA made it more steeply stacked against developing

countries." The way in which the international system was regulated, through subsidies, market liberalisation and punitive tariffs had made it impossible for farmers in developing countries to compete; the AoA did nothing to improve the situation. For example, in 2003 US agricultural exports were sold for between 10 and 50 percent below the cost of production. (Clapp, 2006)

The Doha Round, named the development round, was supposed to shift the emphasis from the agenda and interests of the developed countries to those of the developing countries and address the inequalities written into the AoA. However, these negotiations have proved difficult and inconclusive. The latest round of talks has been the Bali Package, agreed in December 2013. (WTO, 2015b) This agreement has also proved problematic with no general consensus reached on public stockholding programmes for food security. However, despite their importance a detailed analysis of these trade negotiations is beyond the remit of this thesis.

Agriculture and Free Trade

International trade and markets are becoming more integrated and complex at every stage of the production and marketing chain, this includes the role played by transnational corporations, which are vertically and horizontally integrated through globalisation, allowing them increasing power over consumers and agricultural producers. In addition, states are ceding some of their sovereignty over their policies through multilateral trade agreements. This is having an

impact at all levels, for those in receipt of the benefits and those that are not. The IAASTD report (2009, p.8) argues that “Although most agricultural production is not traded internationally, national agricultural planning and AKST (agricultural knowledge, science and technology) investment is increasingly orientated towards exports markets and designed to comply with international trade rules.”

By removing support for farmers, such as research and extension services, and dismantling mechanisms designed to help stabilise food prices, including grain reserves, as part of the SAPs, and then opening agricultural markets as required by multilateral trade agreements small-scale farmers in developing countries have suffered the consequences of these neoliberal market based policies. According to WDM (2012, p.3) this has had a serious impact on farmers around the world as “unable to compete with the low prices, millions of farmers have seen their livelihoods destroyed and then faced poverty as landless rural workers or urban slum dwellers.”

Agriculture is inherently connected to so many different sections of society as agricultural producers and consumers, impacting upon rural livelihoods and urban overcrowding, the wider economy and the environment. Unlike any other sector agriculture has a number of distinctive features, which make it incompatible with free trade. For example, food as a basic requirement for life is too important to be treated as a mere commodity. Food production also impacts

upon so many different areas of importance, some of which are global public goods, and with such wide-ranging consequences.

Wanki Moon (2011) argues that agriculture related problems are too diverse and complex to be left to free trade. Three features make it distinct from the production of other commodities. Firstly agriculture produces an array of nonmarket goods and services, in addition to its marketable products, which are collectively known as multifunctionality of agriculture. Secondly it is intimately connected to the provision of very important global public goods, such as sustainability, climate change mitigation and food security. Additionally, taking these two features into consideration, it plays distinctively different roles across different countries. He cites four underlying rationales for agricultural protectionism; the domestic promotion of food security, as a tool to mitigate excessive market fluctuations, to correct market failures associated with multifunctionality and the protection of farming interest groups; the first three reasons Wanki argues are legitimate but the fourth is not.

Wanki argues that too much time and effort is being wasted on the unworkable liberalisation of agricultural trade and taking into consideration the important role that agriculture plays in the provision of a number of different goods and services at the national and global level a different approach to its governance should be taken. Wanki argues (2011, p.13)

> *When the global community is too much preoccupied with the illusive mission of agricultural trade liberalisation, the great danger is that such preoccupation may distract it from effectively addressing the agriculture-related problems of the 21st century in a timely manner that pose imperative challenges to humanity.*

Brian Elliot (2014, p.8) agrees with Wanki's assessment of agriculture's special status, arguing that "being sensitive to the sustainability dimensions of agriculture means that, at a minimum, economic profit making can only be one of a number of desirable outcomes." However Elliot highlights the potential benefits of the Common Agricultural Policy (CAP) of the EU, which is criticised by many non-EU countries. He argues that rather than being "a subterfuge to maintain unfair domestic subsidization" the retention of subsidies through the CAP and their re-categorisation from Amber to Blue boxes can be seen as useful as the "EU rationale for continued CAP payments increasingly pertains to marginal agricultural practices" (2014, pp.8-9). The EU has argued that these subsidies are helping producers on the margins, such as those practising low-intensity animal husbandry in the uplands or managing olive plantations in arid areas, which in turn help preserve the vitality of rural communities.

Elliot argues against the pursuit of trade liberalisation to the neglect of all other considerations. In fact he maintains that if free trade was actually achieved most European farmers would be unable to provide many of the public goods they

currently do. This would lead to a situation in which “governmental institutions would almost certainly have to assume the more onerous task of deploying specialised land managers to maintain ecosystem services at optimal levels.” (Elliot, 2014, p.9) He concludes that instead of abandoning the CAP, a move that would impact negatively on social and environmental sustainability, the system should be made fairer to all by correcting the international agreements to “allow nations to direct revenue towards domestic agriculture provided there was a compelling and verifiable sustainability case.” In this manner the “EU agricultural policy, with its core recognition of the multiple functions of farming, has the potential to become a model for future international agreements.” (Elliot, 2014, p.10)

Undoubtedly agriculture produces many vital public goods that if managed properly could address some of the many challenges faced. The proper management of natural resources, such as land, soil, water, biodiversity and forestry, can be achieved through sustainable agricultural practices. This would not only assist in the protection of these depletable resources, but also allow for more sustainable production methods, which could increase food production, alleviate rural poverty and ensure food security. By using sustainable methods, such as agroecological production, it could also help this generation and future generations. The provision of global public goods will be discussed in more detail in chapters two and eight. The complex relationship between agriculture and climate change will be discussed in the following section.

Industrialised Agriculture versus Small-Scale Farmers

Food can be produced in many different ways from methods used by subsistence farmers in developing countries to highly mechanised industrial production methods used mainly in developed countries, with many variants in-between. Food and its production has always been an environmental, economic and political force (Fraser and Rimas, 2011; McKeon, 2013; McMichael, 2013). People have always had disagreements about production methods, ownership and control; today is no different.

In the twenty-first century there are many different types of agricultural production but their ideological differences can be viewed from two main perspectives: industrialised agricultural production, which relies on technology, mechanisation, oil-based inputs and high water consumption; and small-scale farmers, who typically use fewer inputs, whose methods are more labour intensive and more localised. The industrialised method has been promoted through many international mechanisms, including the IFIs through the SAPs and PRSPs as part of the neoliberal agenda. (Weis, 2007) In addition to its promotion in developing countries it is also the method most commonly used in developed countries, although even here there has recently been a

reawakening to the benefits of more sustainable production methods, such as those practised through organic farming.[3]

Small-scale farmers, traditionally under-valued and often over-looked, especially at the national and international level, are now joining forces through civil society organisations like La Via Campesina. This international movement brings together more than 200 million small and medium-scale farmers, male and female, as well as indigenous peoples, agricultural workers, landless people and migrants from 70 countries. La Via Campesina was established in 1993 as a reaction to the imminent creation of the WTO to enable small-scale farmers to defend their interests at the global level. Through this movement they have campaigned for a just, democratic and sustainable food system, a concept now known as food sovereignty. (WDM, 2012; McKeon, 2013) Since the 1990s La Via Campesina has worked hard to gain recognition for its members and their concerns. It is now an active participant in international negotiations on the issues impacting on food production and food security, in FAO, most notably the Committee on World Food Security. This will be discussed in chapter eight.

There are many interconnected challenges facing agriculture; arguably the most notable are climate change, the scarcity of water and ownership of land. The inequalities within the global system are demonstrated through the different

[3] According to the Soil Association's 2015 Organic Market Report sales of organic products in the UK increased by four percent in 2014, even in a market that saw food prices down by 1.9 percent and food spending down by 1.1 percent. Shoppers spent an extra £1.4 million a week on organic products and the organic market exceeded £1.86 billion. (Soil Association, 2015)

ways in which people are affected by all three of these challenges. However, as the impacts of climate change extend across the globe more and more people will be affected in more complex and increasingly direct ways. There will now be a short examination of each of these three areas as it relates to the two main types of agricultural production.

Agriculture and Climate Change

It is now widely acknowledged that two of the main challenges facing humanity in the twenty-first century are food security and climate change. (FAO, 2011d; HLPE, 2012; De Schutter, 2014; Beddington, 2009; IAASTD, 2009) As these two challenges are interlinked they have to be addressed in a holistic way. In recent decades, and even in the last few years, climate change has moved up the international agenda. Its multidimensional impacts are being monitored in detail by the Intergovernmental Panel on Climate Change (IPCC) and it is discussed annually at the Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC), which was adopted at Rio in 1992. These bodies continue to investigate ways in which to mitigate climate change as well as find ways in which to adapt to its consequences, which can include adverse changes in precipitation, sea level rise and the occurrence of extreme climatic events including drought, floods and coastal storms.

The High Level Panel of Experts on Food Security and Nutrition (HLPE, 2012, p.11) argues that climate change will make it more difficult to address the

already huge challenges of food insecurity “as it reduces the productivity of the majority of existing food systems and harms the livelihoods of those already vulnerable to food insecurity.” Climate change impacts on agriculture, a situation that will become increasingly apparent, and agriculture, especially industrialised production methods, also impacts on climate change. It is part of the problem and must therefore form part of the solution.

The drive to increase food production in the second half of the twentieth century has created a number of inter-related problems. For example, the ‘green revolution’ started in the 1960s was a technological package that “combined the use of high-yielding plant varieties with increased irrigation, the mechanisation of agricultural production and the use of nitrogen-based fertilizers and pesticides.” (De Schutter, 2014) This led to the extension of monocultures, loss of biodiversity, accelerated soil erosion, pollution of fresh water supplies and a flow of phosphorus into the oceans.

However, despite the negative consequences there are advocates of the Asian ‘green revolution’. Djurfeldt et al (2005, p2) argue that it has been largely successful in famine prevention with a number of previously food-deficit countries now exporting. In fact, the authors state that “comparing the first and last five-year annual averages during the entire period, 1961-2001, per capita output in Asia grew by 24 percent while it decreased by 13 percent in sub-Saharan Africa.” Nevertheless it has to be noted that the authors then argue that

the ‘green revolution’ has been too narrowly defined when it is seen as a package of technology, instead they regard it as a “state-driven, market-mediated and small-farmer based strategy to increase the national self-sufficiency in food grains.” (Djurfeldt et al, 2005, p3)

The ‘green revolution’ in Asia has tripled food production ensuring hundreds of millions are out of hunger, argue Keijiro Otsuka and Kaliappa Kalirajan (2006). In addition, the rice-based production and post harvest operations employ nearly one billion people in rural areas in developing countries. The authors call for a ‘green revolution’ in SSA but recommend taking account of African-specific production environments rather than a direct transfer of existing technology.

However, Vandana Shiva (2000) is forthright in her condemnation of the Asian ‘green revolution’ which she argues reduces the available food for farm-based families in developing countries, through the promotion of monocultures and loss of diversification. She argues that by having shorter stems the miracle varieties produce less straw to feed cattle and to feed back into the soil, creating an impoverished growing environment and affecting the farmers’ ability to grow other foods, such as beans, legumes, fruits and vegetables.

Nevertheless, industrialised methods have been used as part of the ‘green revolution’, as well as in wider agricultural production, and have increased agriculture’s contribution to greenhouse gas emissions. According to the HLPE

(2012) 15 percent of the total human-made greenhouse gas emissions are as a direct result of crop and livestock agriculture. This includes direct emissions from agriculture, such as methane (CH_4) emissions from livestock and flooded rice fields, nitrous oxide (N_2O) emissions from the use of organic and inorganic nitrogen fertilizers and carbon dioxide (CO_2) emissions from the loss of soil organic carbon. Agriculture is responsible for additional greenhouse gases through its contributing factors, including the production and transport of fertilizers, herbicides, pesticides and the energy consumed through tillage, irrigation, fertilization and harvest, as well as additional emissions associated with transportation and refrigeration as food is flown or shipped around the world. In addition, if land use change, including deforestation, is taken into consideration agriculture contributes a further 15 to 17 percent to the total global greenhouse gas emissions.

The results of these multilayered issues are now being seen across the agricultural sector, from individual farms to international systems; the livelihoods of those in rural areas are affected directly and urban dwellers indirectly. Climate change affects plants, animals and natural systems through changes in temperature, rainfall and the impact it has on pests and diseases of crops, animals and fish. These changes are creating additional problems for already vulnerable people. For example, according to the HLPE (2012, p.12): “Dryland agriculture in arid and semi-arid regions, where over 40 percent of the world’s population and more than 650 million of the poorest and most food insecure

people live, is particularly vulnerable to the risks of climate change and variability, drought in particular." In addition to the challenges posed by irregular precipitation, many people live and significant quantities of food is produced in low-lying coastal areas where climate change may also be responsible for saline intrusion, sea level rise and increased flooding. (HPLE, 2012; FAO, 2011d)

Industrialised agricultural production methods require the use of oil-based pesticides and fertilizers and large quantities of water. Both oil and water are in increasingly short supply, especially in many vulnerable areas. As temperatures rise and more land becomes arid or semi-arid the pressures on land will become even more pronounced.

John Beddington (2009) the UK's chief scientific adviser, argues that because of the predicted population increase by as early as 2030 the world will need to produce around 50 percent more food and energy, together with a need for 30 percent more fresh water, whilst mitigating and adapting to climate change; combined these drivers will create the 'perfect storm'. He proposes the use of science and technology to meet these increasing demands but acknowledges this has to be achieved in a sustainable way. He proposes (2009, p.8) a 'greener revolution' similar to that used in the 1960s but with a focus on important areas including: "crop improvement to increase yields and tolerance to stresses such as drought", as well as the introduction of "new pesticides and their effective management to avoid resistance problems" and "novel non-

chemical approaches to crop protection". He predicts that "techniques and technologies from many disciplines, ranging from biotechnology and engineering to newer fields such as nanotechnology, will be needed."

This range of technological solutions is far removed from the agroecological solution endorsed by the former special rapporteur, De Schutter; the IAASTD team and food sovereignty movements. De Schutter (2014, p.8) calls for a shift to agroecological modes of production and argues that "as a way to improve the resilience and sustainability of food systems, agroecology is now supported by an increasingly broad part of the scientific community." As part of this scientific community De Schutter cites the IAASTD team. In its report, which was based on the findings of 400 experts from across the world, the team argues (2009, p.67) that:

> *better use of local resources in small scale agriculture can improve productivity and generate worthwhile innovations and agroecological/organic farming can achieve high production efficiencies on a per area basis and high energy use efficiencies and that on both these criteria they may outperform conventional industrial farming.*

The team found that although these types of production may be higher in labour intensity and may not offer the same level of economic efficiency across all areas, these agroecological forms of production have the "capability of producing enough food on a per capita basis to provide between 2,640 to 4,380

kilocalories/per person/per day (depending on the model used) to the current world population." (IAASTD, 2009, p.67)

By comparison the team found that industrial models potentially increase environmental risks through the promotion of monocultures, which in turn reduce biodiversity, ecosystem functions and ecological resilience; as a result they not only contribute to climate change but are themselves more vulnerable to it. This is in addition to their production of greenhouse gases, excessive consumption of energy and water, as well as the wide-spread pollution of fresh water. The report argues that "While industrial production systems yield large volumes of agricultural commodities with relatively small amounts of labour, they are often costly in terms of human health, have additional environmental impacts and are frequently inefficient in terms of energy use." (IAASTD, 2009, p.10)

Members of the food sovereignty movement see agroecological production as an integral part of food sovereignty as it mainly relies on renewable resources, often available to the farmers on their own farms, which removes the necessity for external inputs like chemical fertilizers. This means small-scale farmers are more likely to be self-reliant and will not necessarily have to purchase, often through credit, expensive oil-based inputs. Agroecological production "involves conserving resources and biodiversity by working with local ecosystems and so is dependent on the specialist knowledge of small-scale producers. Agroecology

not only benefits the environment and makes farming more resilient, but can also increase productivity, particularly for small-scale farmers." (WDM, 2012, p.2)

The connections between agriculture and climate change are complex; agriculture is a major contributor to climate change and is in turn affected by it. Evidence linking industrial agricultural production with all levels of environmental damage, from greenhouse gas emissions to wide-scale pollution, has been growing for decades and is now irrefutable. All agriculture is now experiencing the consequences. Although there is no one size-fits-all solution to these complex issues there should be a greater acknowledgment of the role that small-scale agroecological production offers.

Agriculture and Water

Water scarcity has a direct impact on food production and food security, although the quantity and quality of the water available is also directly affected by agriculture. There is no doubt that food production, which is now slowing will have to improve significantly to feed the predicted increase in population. The FAO predicts that by 2050 another one billion tonnes of cereal will be required per year, as will 200 million extra tonnes of livestock products. (FAO, 2011d)

All aspects of food production are already coming under increasing strain, most notably land and water. Of all the water on the planet only 2.5 percent is fresh

water and only 30 percent of this water is available for use as the rest is locked in glaciers or permafrost. Of all the water used from rivers, lakes and groundwater 68 percent is used for agriculture (ICA, 2012). Irrigated agriculture is by far the largest water user globally, with approximately 252 billion cubic meters of surface and groundwater withdrawals in 2013. This overuse is a concern as groundwater is not renewable in human timescales and climate change is adding uncertainty to the availability of water from precipitation. (HLPE, 2015)

With water-intensive industrialised methods of agriculture this is now causing significant problems with water scarcity increasing. According to FAO (2011d) fresh water supplies are under strain and there are deeper structural problems in the natural resource base. Issues include:

- Salinization and pollution of water courses and water bodies;
- Degradation of water-related ecosystems;
- Many large rivers' volumes have dropped dramatically;
- Some rivers, such as the Huang He, no longer reach the sea all year round;
- Large lakes and inland seas have shrunk;
- Half the wetlands of Europe and North America no longer exist;
- Runoff from eroding soils is filling reservoirs, reducing hydropower and water supply;
- Groundwater is being pumped intensively

- Aquifers are becoming increasingly polluted and salinized in some coastal areas.

FAO (2009, p.5) argues that “large parts of all continents are experiencing high rates of ecosystem impairment, particularly reduced soil quality, biodiversity loss, and harm to amenity and cultural heritage values.” This of course, also impacts directly on food security.

Although all agriculture consumes water industrialised methods not only consume more water they also impact negatively on water systems in a myriad of other ways too. The IAASTD (2009, p.10) argues that “Runoff and seepage of synthetic fertilizers and concentrated sources of livestock waste damage aquifers, rivers, lakes, and even oceans – with costly effects on drinking water quality, fish habitat, safety of aquatic food and recreational amenities.” Weis (2007, p.31) states that the cumulative impact of industrialised farming on water is most evident in the ‘dead zone’ of the Gulf of Mexico “where unnatural levels of nitrogen and phosphorus, stemming mostly from agricultural run-off in the Mississippi river basin, foster the growth of large algal blooms which choke the oxygen from (or *eutrophy*) thousands of square miles of coastal waters and make it uninhabitable for aquatic life.”

As the population increases there will have to be a significant increase in the amount of food produced; and as more people are lifted from poverty they will

choose to eat meat, which will increase demand for food that is more environmentally costly to produce. According to FAO (2009a) by 2050 when the population is expected to reach nine billion, annual meat production will have to rise by over 200 million tonnes to reach 470 million tonnes. De Schutter (2014, p.6) argues that this is unsustainable as “continuing to feed cereals to growing numbers of livestock will aggravate poverty and environmental degradation.” Weis argues (2007) that dense livestock production is a major consumer and polluter of water. More than 3,000 litres of water goes into the production of just one kilogram of US beef. This is in addition to the huge amount of manure created by agricultural animals, approximately 1.4 billion tonnes each year in the US, most of which is concentrated on factory farms and feedlots. Animal agriculture has been recognised as the single largest threat to US waters.

Industrial agricultural production methods are having a devastating impact on fresh water sources and oceans around the world. These externalities are not factored into the end price of the food produced with the final cost being borne by those least able to absorb the cost; often the poor and food insecure in developing countries. Therefore these issues have so far been ignored by those promoting industrial methods. However, the implications are now so serious and the impact felt by so many that actions will have to be taken. Sustainable agricultural methods will have to become the norm across all sectors if food security is to be achieved using only the limited resources available, especially water.

Agriculture and Land

Land, like water, is essential for agricultural production. Ownership of land has always been a politically sensitive issue (Fraser and Rimas, 2011) but the situation has changed rapidly in the last two decades in response to the conditions enabled through neoliberal policies, the impact of globalisation and the fear of food, water and fuel scarcity. (McMichael, 2013; Murphy, 2013; Margulis and Porter, 2013)

The twenty-first century has seen a significant increase in large scale investment in land; often there is an international dimension to this new surge of land acquisition. The media has labelled these large-scale land deals as 'land grabs' (Vidal, 2015). Although there is an urgent need for increased investment in agriculture the impact of these large deals has so far proved overwhelmingly negative. (HLPE, 2011; Murphy, 2013; Chavkin, 2015)

Murphy (2012, p.3) argues that globalisation has played a crucial role with the "deregulation of trade and foreign investment laws, which has greatly eased cross-border capital flows, relaxed the limits on foreign land ownership and opened markets to agricultural imports." A loss of confidence in the international trading system following the food price crisis of 2007-2008 also prompted many rich net-food importing countries, such as Saudi Arabia and Kuwait, to invest in growing food abroad. These pressures have been compounded by the impact of climate change, which is making domestic food supplies less certain. For

example, the US lost 40 percent of the acreage planted with maize to drought in 2012. (Murphy, 2013)

The HLPE (2011) investigated the impacts of large scale investment in land, whilst also acknowledging the role played by domestic investment. The international dimension is seen as particularly important because of the unequal access to resources enjoyed by different actors. The report argues that land is increasingly being seen as a global asset to be traded just as any other commodity; however land plays a more diverse, complex and important role. It provides a livelihood to more than two billion small-scale farmers, many of who are poor and food insecure; it provides valuable environmental services and it has strong social and cultural attributes.

Despite its importance, including its role in providing a range of global public goods, governments in many states are prepared to allow private investors to purchase or lease common land. As these land deals are lucrative governments have been reluctant to acknowledge the importance of common property and local systems of management. In many states the “absence of clear markers in many collective lands often results in these areas being classified as unproductive or unused (Ethiopia), idle (Tanzania), degraded (Indonesia), or wasteland (India) (HLPE, 2011, p29).

The scale of these land deals is difficult to determine because there is secrecy from both the investors and the host governments about their scale and terms. However widely quoted figures assert that between 50 and 80 million hectares of land have been the subject of negotiations by international investors; much of this land is in developing countries (HLPE, 2011). This land has been acquired for a number of reasons from the production of biofuels, for the extractive industries, foreign states attempting to assure their own populations' food security, farmers in neighbouring states seeking to expand their own enterprises, as well as financial institutions broadening their asset portfolio.

There is also a range of environmental factors driving this increased interest in large-scale land investment. Access to water and productive agricultural land is behind many of these land deals. The Gulf Cooperation Council (GCC) countries[4] have used their own fossil water resources at an unsustainable rate and are still unable to produce enough food to feed their own people. Apart from Oman all the GCC countries have renewable water resources of less than $1{,}000^3$/year per capita, the benchmark to identify chronic water scarcity. (Ambalam, 2013) Some of the GCC countries have implemented policies to preserve their own water reserves whilst securing enough food. For example, Saudi Arabia has phased out its domestic wheat production and established

[4] The members of the Gulf Cooperation Council include all the states of the Persian Gulf except Iraq. Members are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE. (Global Security.org, 2016)

new agricultural policies focused on preserving domestic water by investing in overseas agricultural projects. (Ambalam, 2013)

Land acquisition has also been prompted by drought as people abandon their own land and move to compete with farmers in other areas, or even other states, as has happened in Ghana, Cote D'Ivoire, Punjab and China, for example. (HLPE, 2011)

According to the Land Matrix Portal (2015)[5] globally there are approximately 38,488,648 ha (hectares) of land that have been the subject of concluded international land deals; there are approximately 16,845,757 ha that are the subject of negotiations for international land deals; and there are approximately 6,498,829 ha that have been the subject of failed international land deals. This means that 78 percent of the proposed land deals (1,053 completed) have already been concluded. The top five countries that invest in land in other states are the US (8,326,469 ha); Malaysia (3,334,509 ha); Singapore (2,932,018 ha); Arab Emirates (2,999,749); and the UK (2,411,279).

Some of the investments are made along former colonial lines, such as those made by the UK, with the majority of investments made in Western and Eastern Africa and South East Asia. Malaysia as the second largest investor in land

[5] These figures were accessed on 12 September 2015. The figures are constantly being updated. The Land Matrix is "a global and independent land monitoring initiative that promotes transparency and accountability" (Land Matrix Portal, 2015)

outside its borders also had some investment by foreign interests within its borders, although to a lesser degree. Singapore, as the third largest investor, has significant interests in Central Africa with 1,498,348 ha the subject of just four land deals. India, Saudi Arabia and China all feature in the top ten of international investors. The top five countries that have international investors negotiating land deals in their countries are South Sudan (4,091,453 ha); Papua New Guinea (3,719,991 ha); Indonesia (3,603,248 ha); Democratic Republic of Congo (2,761,221 ha) and Congo (2,178,000 ha).

Many of the countries targeted by investors are themselves food insecure with weak and/or corrupt governments. This power imbalance is exacerbated by the distortions in the international legal systems which are characterised by a "lack of investment law in the recipient countries, leaving the affected communities at a severe disadvantage in the contract negotiations" (Murphy, 2013, p.4). McMichael (2013, p.55) also highlights this imbalance which he argues has been promoted through the implementation of a new parallel infrastructure of private and voluntary rules that has in turn been "enabled by international legal protections that have deepened during the era of political-economic liberalisation." He argues that in contrast "international conventions regarding land rights for indigenous peoples and communities are considerably weaker than investment law." (McMichael, 2013, p.55) States are more vulnerable as their public capacity has been dismantled over several decades through the implementation of SAPs and other mechanisms of neoliberalism, as well as a

decrease in investment. This saw public expenditure on agriculture in developing countries fall by 50 percent from US$ 7.6 billion to just US$ 3.9 billion between 1980 and 2006. (McMichael, 2013)

Although attaining food security of domestic populations is one reason for land acquisition it is not the only reason, and in many cases not even the primary reason. The Land Matrix has also gathered information on the intended use for the land acquired for 77 percent of the overall deals, for approximately 29,839,438 ha globally. Of this 77 percent only ten percent has been acquired to produce food; 32 percent will be used for non-food crops; 18 percent for flex crops[6]; and 40 percent for multiple-use crops, with several crops in different categories. This pattern across the world means that only 13 percent of the land will be dedicated to growing food crops in Africa; in America 18 percent; in Asia only four percent; Europe seven percent and Oceania only three percent. (Land Matrix Portal, 2015) Non-food crops and flex crops include the production of biofuels, which is a significant factor in eroding food production; however an investigation into biofuels is beyond the scope of this thesis.

Taking agricultural land out of food production is having serious consequences for those who have been displaced. Many projects supported financially by the World Bank are aimed at boosting electricity and water supplies and expanding

[6] Flex crops have multiple and flexible uses across food, feed and fuel complexes and industrial commodities. For example corn can be eaten fresh, frozen or tinned; used to produce industrial sweeteners, processed into animal feed or milled to produce ethanol for fuel for vehicles. The most popular flex crops are maize, oil palm, soybean and sugarcane. (Borras, 2013)

transport networks in some of the world's poorest countries. Despite having guidelines on land grabs in place an investigation has found that the bank is repeatedly violating its own policies by funding projects that have resulted in nearly 3.4 million slum-dwellers, farmers and villagers losing their land or having their livelihoods damaged in the last decade. For example, 1.2 million people were displaced economically or physically in Vietnam by projects to build dams and power plants funded by the World Bank. One million people in China have also been displaced by projects totalling about US$ 12 billion investment. In fact, the World Bank is funding more and more projects that require forced resettlement with only eight percent in 1993; a figure that had risen to 29 percent by 2009. (Chavkin and Anderson, 2015)

The issue of land tenure illustrates the tension between industrial agricultural production and small-scale methods most keenly. There are approximately 450 million small-scale farmers worldwide who provide livelihoods for around two billion people. However, these small-scale producers, or smallholders, are politically weak and often ignored. The HLPE (2011, p.33) argues that "Most of the discussion about 'modernising' agriculture and encouraging international investment takes place in UN, G20 and World Bank circles, but not in the countries most concerned, nor with the people most affected."

Nevertheless, it has to be noted that the World Bank's position on issues surrounding communal land has changed over the years, placing greater

emphasis on the rights of small-scale producers (World Bank, 1975; Deininger and Binswanger, 1999; Deininger, 2003). Reviewing the evolution of the World Bank's land policy, from the mid-1970s to the turn of the century, Deininger and Binswanger (1999), found that although the three guiding principles: the desirability of owner-operated family farms, the need for markets to permit land to be transferred to more productive users and the importance of egalitarian asset distribution, had remained the same the World Bank now recognises the potential benefits of communal tenure systems, which could, in fact, be more cost-effective than formal titles. For example, communal land will not incur costs associated with protecting individual plots but will instead offer benefits such as the provision of public goods or advantages "in synergies that would be difficult to provide under individual cultivation, including risk reduction through diversification." (Deininger and Binswanger, 1999, p.258) In addition, by the late 1990s the World Bank recommended that titling programmes should be judged on their equity as well as their efficiency and the potential for land rental markets was also seen in more favourable terms.

Despite the potential benefits of communal land tenure securing the land rights for communities can be complex and effective land governance, although desirable, may be difficult to achieve (Lavigne Delville, 2010; Deininger et al, 2010). Through an analysis of the impact of Rural Land Maps in West Africa Philippe Lavigne Delville found that small elites were protected by the law and administration, whereas the vast majority of the population was not; this was

evident in the lack of land rights held by small-scale producers. However, despite the challenges presented by the complexity of registering communal land, there were benefits such as the avoidance of conflict, with a fairer balance between poor farmers and urban buyers; positive impacts on productivity and as a basis for fiscal revenue for local governments. He argues there needs to be a change “from a dual, exclusive legal framework to a plural, inclusive one, built on an articulated diversity of legal statuses” (Lavigne Delville, 2010, p66).

In the World Bank report on land rights focused on recognition, administration and governance Deininger et al (2010) examine the multifaceted nature of land ownership. With a focus on land governance and the MDGs Deininger and Enemark (2010, p22) recognise the importance of good land governance for achieving sustainable development and the MDGs and argue that land policies should be implemented that reflect the needs of the society. They state that the formalised Western land registration systems “cannot adequately provide security of tenure to the vast majority of the world’s low income groups or deal quickly enough with the scale of urban problems.” Instead, in countries where tenures are predominantly social rather than legal, a new innovative approach maybe more applicable. They cite (2010, p22) the example of a system that uses a

> *continuum of land rights (including piecemeal tenure, customary, occupancy, adverse possession, group tenure, leases, freehold) where the range of possible forms of*

tenure is considered as a continuum from informal towards more formal land rights and where each step in the process of tenure can be formalised.

Arguably by granting small-holder farmers land tenure, through whatever approach, they will be in a more secure position, which will have a positive impact on their ability to produce food. Good land governance is a critical precondition for sustainable economic development. Secure land rights provide a more secure environment to enable longer term investments, as well as the transfer of land through rental and sales, which in turn promotes better use of land and facilitates entrepreneurs.

However, despite the growing consensus on the need for legal protection for small-scale producers not everyone is in agreement. Paul Collier (2008) in response to the food price crisis of 2007-08 calls for fewer peasants and more commercial farming, based on scientific advancements, including genetically modified foods. He berates the middle and upper classes for their “love affair with peasant agriculture”, in which “peasants, like pandas, are to be preserved” despite the fact “their mode of production is ill suited to modern agricultural production, in which scale is helpful.”

This perspective is countered by the evidence, as revealed by the HLPE (2013) in its analysis of smallholder agriculture. The report’s dataset covered two thirds of the world’s population and 38 percent of the agricultural area, including

China. It found that the total number of smallholdings in the developing countries was approximately 500 million units. “China has close to 200 million smallholdings; they cover only ten percent of the agricultural land that is globally available and they produce 20 percent of all food in the world.” The HLPE (2013, p12) argues that: “This is an important indication of the productivity that can be achieved in smallholder agriculture relative to larger farms.”

As previously discussed, the livelihoods of small-scale producers, especially those farming on communal land, are often threatened by the selling of large tracts of land. David Nally (2013) argues that these land grabs differ from ‘ordinary’ land acquisitions in five ways.[7] Additionally the food security discourse is being used to justify these land grabs, argues Nally, who cites the continuing calls to close the yield gaps by increasing production on ‘unutilised’ land in developing countries, especially in Africa. He challenges the focus on industrial agriculture as put forward by the multinational seed and fertilizer companies.

Even with this limited examination of the issues it is evident there are disagreements on the best ways in which food should be produced. However there is an increasing body of evidence illustrating the damage caused by industrial agricultural production methods to the environment, water sources and

[7] Land grabs do not entail the ‘free prior and informed consent’ of the dispossessed; investors seldom conduct impact assessments of the possible social, economic and environmental consequences; the contracts are either vague or non-binding; land deals often go hand in hand with human rights violations and most deals are secured without democratic participation or independent oversight. (Nally, 2013)

local populations. Agroecological farming, given the right support, can be highly productive. A study of agroecological farming covering 287 projects in 57 countries found that yields increased by an average of 70 percent compared with conventional production methods. Currently 70 percent of the world's population are fed without reliance on industrial food production, which demonstrates the method's ability to help feed the world (WDM, 2012).

The Food Price Crisis

The Food Price Crisis of 2007-2008 and the additional price spikes of 2010-2011 brought the challenges facing the global food system to the world's attention as commodity prices more than doubled, the number of hungry reached over one billion and violent protests broke out in countries around the globe. For the poorest, those living on less than a dollar a day and who already spent 80 percent of their income on food, the doubling of food prices caused even greater suffering as they faced hunger and malnutrition. (FAO, 2009a; Mittal, 2009; Rogers, 2008b; ESA, 2011; Wise and Murphy, 2012; Oxfam, 2010)

The increase in prices was sudden and significant: in the three years from 2005 to 2008 food prices increased 75 percent, with nearly every commodity affected. The prices of wheat, butter and milk had tripled from 2000 prices, and the prices of maize, rice and poultry nearly doubled. In fact, the food price index rose by nearly 40 percent in just 2007. (IFPRI, 2008) At the World Food Summit (2009b, p.1) member states recognised the situation as "an unacceptable blight on the

lives, livelihoods and dignity of one-sixth of the world's population." However, with the arrival of the global financial crisis attention soon turned to other matters and the hungry were all but forgotten by world leaders and the general public.

From 2010 to 2011 there was a second price spike, which drove the global food import bill for 2011 to US$ 1.3 trillion. (Wise and Murphy, 2012) Although food prices have fallen from their peak it is expected that they will remain significantly higher than pre-crisis levels for years to come as agricultural production is placed under increasing strain. Projections for future food prices have demonstrated that if governments take a business-as-usual stance to climate change and many of the other challenges facing the food system that world cereal prices will rise by 30 to 40 percent and meat prices will rise by 20 to 30 percent by 2050. (IFPRI, 2008)

There were a number of reasons for the sudden and significant increases in food prices. Some changes in the global situation were recent, such as the pressure on land use with the introduction of biofuel production. Subsidies in the EU and US had made the growing of crops for biofuel increasingly attractive to farmers. For example, by 2008 the US government was providing US$ 7 billion a year in federal subsidies to its farmers for growing crops for fuel (Rogers, 2008b). Biofuels were not only grown on land previously used for food production but they also "tightened the correlation between oil and agricultural

commodity prices creating new pricing signals that have little to do with food security or demand for food." (Murphy, 2013, p.7) This increased price volatility and created a less stable distribution system, especially for food imports into poor net-food importing countries.

High oil prices, which by February 2008 were up by 19 percent at an all-time high of US$ 100 a barrel, increased the cost of oil-based inputs, such as fertilizers and fuel used in industrial agricultural production methods. This had a significant impact on US production prices and therefore the export prices of US commodities, which rose by 15 to 20 percent between 2002 and 2007 (Mittal, 2009). High oil prices also made the diversion of agricultural land to fuel production even more attractive. In 2007 the US produced a record maize harvest but one third of this went to produce ethanol. Globally this had serious implications, especially for the poorest and most food insecure. Staple grains such as maize and rice are the main food source for people in low-income countries. For example in low-income countries in Asia they account for 63 percent of the calories consumed and 50 percent in sub-Saharan Africa. The production of biofuels demonstrates the power imbalance in the food system. As IFPRI (2008, p.5) argues "450 pounds of maize can be converted into enough ethanol to fill the 25-gallon tank of an SUV with pure ethanol one time – or used to provide enough calories to feed one person for a year." In fact, the quantity of cereals diverted to biofuels is equivalent to the annual cereal consumption of about 800 million people. (Jarvis, 2009)

Nevertheless, many developing countries are implementing pro-biofuel national strategies to improve their own energy security and to increase their exports, among them Malawi, Mali, Mauritius, Nigeria, Senegal, South Africa, Zambia and Zimbabwe. Many have joined the Pan-African Non-Petroleum Producers Association. Molony and Smith (2010), through an investigation into the likely impact of biofuel production on local food security, have found there are many different approaches. For example, political unrest has followed an agreement between the government in Madagascar and Daewoo Logistics of South Korea, which has agreed to lease 1.3 million ha of land. Approximately the size of Belgium, the land will be used to produce maize and palm oil. However, in Mozambique the government has partnered with a research institute and a private company in an initiative to boost the livelihoods of 5,000 smallholders, whilst producing 100,000 litres of sorghum ethanol annually. Molony and Smith (2010, p.494) argue that if developed properly the "cultivation of biofuels may be instrumental in long-term poverty reduction in developing countries that have a high dependence on agricultural commodities, with benefits in the form of employment, skills development and the nurturing of secondary industries." However, to ensure this happens there will need to be "strong and thoughtful state regulation if biofuels are truly to be pro-poor." (Molony and Smith, 2010, p.495) The authors predict that without strong leadership the temptation to scale up production to maximise profits will soon displace any meaningful pro-poor initiatives.

Additional strain has been placed on the food system with increased demand for high-value products like meat, dairy, fish, fruits and vegetables in the new middle classes in the emerging economies, most notably China and India. (IFPRI, 2008; Beddington, 2009) However, Mittal (2009) disputes this claim arguing that although there has been some increase in demand for high-value products in China and India this has been met by an increase in domestic production and has therefore not had a significant impact on the global situation.

Climate change also continued to play a part with the world's largest wheat producer, Australia, caught in the worst drought for a century, which lasted for six years and reduced the country's rice crop by 98 percent. Agricultural production was also reduced by other extreme weather conditions, such as floods in West Africa and Mozambique, and adverse conditions in Northern Europe, the Russian Federation and Ukraine in 2007. (IFPRI, 2008; Beddington, 2009; Mittal, 2009)

Combined with these poor harvests the world's grain stocks had reached the lowest levels for decades with the US wheat stocks at their lowest for sixty years. Mittal (2009) argued that the private sector and IFIs viewed public stocks as costly and inefficient; there was a rise in the 'just-in-time' style of management of inventory and market liberalisation had created a general perception that individual countries did not need to hold public grain reserves as

the market would provide if necessary. This proved incorrect; instead speculation drove hyperinflation with greater participation of hedge funds, index funds and sovereign wealth funds, especially after the sub-prime problems in the US market. Fund money invested in commodity indexes climbed from US$ 13 billion in 2003 to US$ 260 billion in 2008. This level of interest in the deregulated market created extreme volatility with wheat prices rising by 46 percent between January 10 and February 26 in 2008; in just seven weeks. (Mittal, 2009)

There were some who benefited from the food price crisis. With the concentration of ownership of the agri-businesses those few large multinational corporations that remained dominated marketing, production and agricultural inputs, and continue to do so. For example, “Monsanto’s net income more than doubled from US$ 543 million to US$ 1.12 billion in the three months up to the end of February 2008, compared to the same period in 2007, as its profits increased from US$ 1.44 billion to US$ 2.22 billion.” (UN, 2011, p.69) In the same period Cargill’s net earnings also soared by 86 percent to US$ 1.030 billion; Archer Daniels Midland increased its net earnings by 42 percent and Mosaic Company, one of the world’s largest fertilizer companies, enjoyed a 12-fold increase in its income. (UN, 2011) Although the relationship between these agri-businesses, industrial agricultural production methods and the overall impact on world food security is an area worthy of further investigation it is nevertheless beyond the remit of this thesis.

The problems associated with extreme price volatility were exacerbated by export restrictions imposed by a number of countries, including those in the Russian Federation, as panic spread. Murphy (2013, pp.6-7) argues that the crisis "marked a watershed in our understanding of the world's food systems" and highlighted the flaws inherent in relying on the open markets to ensure food security. In fact the open market imperfectly regulated and with its inherent power imbalances, was part of the problem. She argues (2013, p.6-7) the

> *panic was largely misplaced, exacerbated by the failings of the WTO's trade rules, which had successfully reined in import tariffs but failed to discipline export taxes, allowing food exporting countries to restrict or even ban exports just when food markets were short on supply.*

The new challenges of biofuel production and increased demand for high-value foodstuffs were added to the inter-connected and multi-layered stresses already apparent in the food system through market liberalisation, climate change, water scarcity and pressure on land, as previously discussed. Mittal (2009) argues that although most attention has been focused on the role of higher energy costs, the decline in the growth of agricultural production and the increased demand from emerging economies there also has to be an evaluation of the structural causes of the crisis, including the decline in investment in agricultural

productivity, the states' reduced role in agriculture and the indiscriminate opening of agricultural markets.

The food price crisis brought the challenges faced by millions of people to the top of the political agenda, at least for a short time. With over one billion people hungry and social unrest in dozens of countries political leaders were forced to listen. (FAO, 2009a; Mittal, 2009; Rogers, 2008b; ESA, 2011; Wise and Murphy, 2012; Oxfam, 2010) However, the financial crisis has since taken precedence, especially in developed countries, but many of the problems remain.

Increased biofuel production actively promoted through government subsidies (Rogers, 2008b; Murphy, 2013) along with damaging price volatility driven by fund managers who took advantage of the deregulated markets were two new and interlinked challenges that had a significant impact on an already struggling and unbalanced food system. (Weis, 2007; De Schutter, 2014) These additional challenges exacerbated the problems of climate change, water scarcity and competition for land; problems that were aggravated by industrial agricultural productions methods. (ICA, 2012; HLPE, 2015; FAO, 2011d; FAO, 2009; Weis, 2007) In addition, the systemic decline in agricultural investment, which reduced the resilience of small-scale farmers, and the low cereal stocks that removed the safety net that should have protected the poor, were both as a direct result of neoliberal policies that had been implemented for decades. (De Schutter, 2014; Mittal, 2009)

Conclusion

Food is essential for life; it is vital to human health and is not a discretionary commodity. Furthermore the right to food is a human right that is enshrined in international law. (United Nations, 1948) Therefore food production should be given high priority at all levels, local, national and international. In addition, it also plays a significant role in the provision of a number of GPGs. However, not all types of agriculture provide the same level of GPGs. In fact industrialised methods, not only fail to provide many GPGs but they are also directly responsible for a wide range of public bads, from greenhouse gas emissions to extensive pollution, which have significant negative impacts. (IAASTD, 2009; Weis, 2007; HLPE, 2015) These externalities are not reflected in the monetary cost of production but instead borne by others, often those least able to bear the additional cost. (Weis, 2007) Moreover, industrial agriculture does not provide the level or breadth of GPGs that sustainable agricultural methods, such as agroecology, have the capacity to provide, including social cohesion and rural development. (Wanki, 2011; Elliot, 2014; WDM, 2012; IAASTD, 2009; HLPE, 2013)

Industrial agriculture creates a wide range of problems especially in relation to climate change (De Schutter, 2014; HLPE, 2012) through its emissions, reliance on mechanisation and oil-based inputs; water scarcity through its over-consumption and pollution of freshwater and oceans, as well as its intensive use of land, promotion of monocultures and degradation of biodiversity. (IAASTD,

2009; ICA, 2012; HLPE, 2015; FAO, 2009; Weis, 2007) These problems are exacerbated by the inclusion of agriculture in the world trading system (Clapp, 2006), which is presented as free trade, but which is in actual fact an unbalanced system (Weis, 2007; De Schutter, 2014; Tansey and Rajotte, 2005) that benefits developed countries at the expense of developing countries and the world's poorest people.

Industrial agriculture has been promoted as part of the neoliberal agenda (Weis, 2007) for decades, being manifested in many different ways in different locations, through increased mechanisation, especially in developed countries; through the 'green revolution' in Asia; and through the removal of state support for agriculture, most notably in developing countries. (De Schutter, 2014) Profit is paramount with economies of scale and a distorted system of state subsidies for industrial methods giving unfair advantages to such methods. The introduction of subsidies for biofuel production and the deregulation of the financial markets that create opportunities for highly damaging price volatility exacerbate the existing situation. (Murphy, 2012, 2013; HLPE, 2011; McMichael, 2013; Land Matrix Portal, 2015; Mittal, 2009; IFPRI, 2008; Rogers, 2008b)

There is a growing consensus that recognises the challenges facing the world in relation to food production and the problems inherent in the present system, which fails to provide food security whilst at the same time adding to the

deteriorating global situation. (Oxfam, 2010; WDM, 2012; Wise and Murphy, 2012) Within this group, which includes the special rapporteur on the right to food, different organisations within the UN system such as FAO, and the millions of farmers in La Via Campesina movement, there is recognition that the planet cannot sustain a business-as-usual approach. (De Schutter, 2014; FAO, 2011d; WDM, 2012; McKeon, 2013) This approach is not working now and it will continue to fail in the future.

There needs to be a move away from the market-based neoliberal agenda focussed primarily on profit and instead put in place a system that recognises the vital role that agriculture plays in the provision of food and also a wide range of GPGs. Agriculture is part of the problem; it has to be part of the solution.

The next chapter will examine the role of international organisations in the provision of global public goods. In later chapters the role of FAO in the provision of these goods will be examined in relation to its ability to help create a food secure world.

Chapter Two:
International Organisations and the Provision of Global Public Goods

Introduction

The provision of public goods, traditionally recognised as non-excludable and non-rivalrous, has always been difficult to achieve, and increasingly so with the shift in mainstream political ideology from the presumption of state provision of goods and services, most notably in the European setting, to the increased privatisation of their provision. The end of the Cold War and subsequent dismantling of much of the former soviet state infrastructure as well as the rise of neoliberalism accelerated this move towards privatisation. However, despite this political shift there have been efforts made to extend the concept of public goods into the global sphere with the examination of the role of international organisations in delivering public goods, such as control over epidemics and global warming, which are beyond the capabilities and borders of states. But as the individual state comes under political and financial pressure in its attempts to provide public goods so do the international organisations, which in reality have relatively fewer resources and less legitimacy in the still state-centric global system, even taking into consideration the impact of globalisation on state sovereignty.

As societies have evolved so has the provision of public goods to the general populace, from the foundation and maintenance of hospitals, poor houses and sanitation systems in the Middle Ages to the fully-functioning societal structures now seen in many parts of the world in the twenty-first century. The earliest forms of public goods were not necessarily delivered by the state, however, but rather through voluntary or private actions, many through the church, and not always for purely altruistic intentions but often in an attempt to stop the spread of disease or to prevent civil unrest. With the advent of the Industrial Revolution in Britain and the political revolutions in France and the US the role of the state changed considerably as did the composition of society as a whole; mass urbanisation in industrial towns helped to create the notion of the citizen, with political power, whose approval was required by the state for legitimacy (Desai, 2002).

This chapter will examine public goods theory, from its inception with the work of Samuelson to its extension into the global sphere as championed by Kaul and her colleagues. The criteria first established by Samuelson have been adapted to suit the global setting but there are many that challenge this development arguing that the complexity of the international arena is not conducive to the provision of Global Public Goods (GPGs). The different aspects of GPGs including the problem of free riding and the balance between public and private will be discussed as well as a number of issues associated with their provision such as state sovereignty, the weakest link, aggregate efforts, externalities and

the principle of additionality. Food security and the Millennium Development Goals are examined for their suitability as examples of GPGs. Finally international organisations, from their early incarnations to the creation of the UN and now their role in the ever changing international arena in the twenty-first century will then be examined.

Public Goods Theory

It wasn't until the mid twentieth century that Paul Samuelson (1954) provided the analytical foundation for public goods. By concentrating his attention on the theory of optimal public expenditure he assumed the existence of two categories of goods; private consumption goods, "which can be parcelled out among different individuals", and collective consumption goods, "which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good" (Samuelson, 1954, p.387).

Samuelson's 'private consumption goods' and 'collective consumption goods' are now more simply defined as 'private goods' and 'public goods' as part of public goods theory. Two core principles of public goods; non-excludability and non-rivalry in their consumption, have remained central to the debate, defined by Severine Deneulin and Nicholas Townsend (2007, p.20) as "a good is non-excludable if a person's consumption of it cannot practically be excluded" and a good "is non-rival if a person's consumption does not reduce the benefits of

someone else's consumption of the good". The lighthouse is an example often cited as a pure public good, as it fulfils both principles. Once in place, a lighthouse will provide guidance to all seafarers within its geographical scope and its functionality will not diminish with the number of seafarers benefiting from its light. These benefits can be enjoyed by all regardless of the individual's contribution to their provision. Street lighting, traffic control systems and national security are all also seen as pure public goods.

Fulfilling these two core principles is not straightforward, a fact which limits the number of goods that are in fact pure public goods, many are seen as impure. James M. Buchanan examines what he termed the 'awesome Samuelson gap' between the private and the public, as originally defined by Samuelson. In Buchanan's (1965, p.2) 'theory of clubs' he examines the best way to determine the "size of the most desirable cost and consumption sharing arrangement" in situations in which exclusion is possible. He argues that this can, in theory, be relevant in most cases, and therefore most public goods are in fact club goods, those that are excludable but non-rivalrous, rather than situated at one polar extreme of the spectrum or the other. The balance between private and public is the reoccurring central theme in public goods theory.

Health services are an impure public good as only a finite number of people can use the services at any one time, with resources stretched if the optimum number is exceeded. In this respect health services are not non-rivalrous, in

other words rivalrous. However, the provision of health services delivered through Britain's National Health Service, as initially conceived in the 1940s, was idealistically non-excludable, as everyone was entitled to use the service regardless of their contribution to its provision, even if in reality they could have been prevented access. Arguably the NHS in this original form was a common good as it was established as non-excludable but by its nature was rivalrous. Since its creation the provision of health services through the NHS has altered immeasurably under successive British governments. Its provision, by public and now private actors, the way in which the service is funded and the way in which it can be accessed and by whom, have all changed in recent years (BBC, 2013). The NHS continues to be central to most public and political debates concerning the provision of public goods in the UK.

The Problem of Free Riding

If an individual may benefit from a good even if they have not contributed to its provision it is argued that the incentive to provide for it is absent. This is one of the issues arising from the principle of non-excludability and which creates challenges for the provision of public goods, most notably the good being under-produced, over-used or degraded. Peter Drahos (2005) argues that there are a number of dilemmas and each requires a different regulatory approach. Game theory forms part of the reasoning behind the self interested preferences, in which individuals have to choose between social cooperation and self interest.

For instance, as seen in the prisoner's dilemma, if the individual selects self interest it prevents the possibility of cooperating for better gains for all.

In the public goods dilemma, also known as the free-rider problem, an individual will gain more by not contributing to the good as they will be able to access it anyway, as by its nature it is difficult to exclude anyone. The commons dilemma creates a situation in which individuals gain by taking from the commons and not contributing to its provision, and in doing so the commons, for example forests or fisheries, are depleted or destroyed impacting negatively on everyone. The intellectual commons is similar to the commons dilemma but it is the exclusion from use that creates the gain for a small number of individuals and leads to the underuse of the good.

All these dilemmas pose different regulatory challenges in terms of effectiveness and responsiveness, for example the standard solution for problems in the physical commons is to grant private property rights. However Drahos (2005) argues that by using property rights to regulate the intellectual commons, as increasingly seen through the use of intellectual property rights[8], there will be considerable resistance to exclusion from this knowledge.

[8] As enshrined in the Agreement on Trade-Related Aspects of Intellectual Property Rights, April 5, 1994, in the Marrakesh Agreement Establishing the World Trade Organisation

The use of coercion to prevent free riding

As there is a presumption to take but not contribute there will be at the very least an under-provision of the public good, unless there is in place a form of coercion. The prevention of free-riding "creates the need for a public authority and legitimises coercion, most notably taxation, to finance the production of the good" (Coussy, 2005, p.182). Mancur Olson (1971a) examined the common assumption held by many economists in the post-war era, ranging from Marxist theories of class action to US research on pressure groups, that groups of individuals with common interests will act on behalf of their common interests in a similar fashion as individuals will to secure their own personal interests. Instead, Olson (1971a, p.2, author's emphasis) argues that "unless there is coercion or some other special device to make individuals act in their common interest, *rational, self-interested individuals will not act to achieve their common or group interests.*" Olson argues that even if there is unanimous agreement within the group about the need for the provision of a common good and even the methods of how to achieve it individuals will still not voluntarily contribute to its provision.

Taking Olson as their starting point Bruce Russett and John Sullivan (1971) examine the conditions for the achievement of public goods, in their terms collective goods, in ten propositions ranging from coercion, "in which members delegate to some authority the right to coerce them, freely accepting the coercion on the condition that it be applied equally to all members" (p.850) to a

strand of political integration theory in which individuals, because they include the interests of others in their own self image, will willing make sacrifices for the greater good. One of the best examples of this selfless behaviour can be seen exhibited by family members, especially parents.

Public Goods and Global Public Goods

Russett and Sullivan (1971) extend their theory to examine the potential for the provision of public goods at an international level, known as international or transnational public goods, or the term to be used here, Global Public Goods (GPGs). At this level GPGs are non-excludable, non-rivalrous and operate across national boundaries, across regions and in some instances, globally. These goods are assumed to have a positive impact. However there is a range of goods, which are arguably consequences of certain detrimental actions, such as food production by industrial methods, which produce global public bads. These have a negative impact that can also be felt across national borders and in some cases globally, for example the impact of greenhouse gas emissions.

The role of international organisations is central to this line of enquiry, as Olson (1971b) recognises in his response to their article. Russett and Sullivan explore the different levels of coercion available to international organisations operating within the international realm and the impact that this has on their ability to deliver the public goods under their remit. With fewer coercive powers an organisation is likely to achieve less, however coercion may not be possible or

desirable and so more non-coercive methods need to be employed. Strong leadership at the level of the state and at the head of international organisations is required to help deliver public goods.

Work by Inge Kaul and her associates at the United Nations Development Programme (1999, 2002a, 2005, 2006) has been instrumental in expanding the theory of public goods into the international realm. According to Kaul et al (2002a, p.61) a public good becomes global "if its benefits (or costs) cut across countries in several regions and across current and future generations, and do not discriminate against any population". They argue that the privateness and publicness of goods are social constructs and in light of this propose "an expanded two-tier definition of public goods that distinguishes between a good's potential for publicness and its being de facto non-exclusive and available for all people to consume" (Kaul et al, 2002a, p.61). And they offer a new tool to analyse public goods, the 'triangle of publicness', which incorporates the publicness in consumption, to determine whether the good is consumed by all; the publicness in net benefits, to determine if the net benefits are equitably distributed and the publicness of decision-making, to ascertain who decides to place the good in the public domain.

Despite the attempts by Kaul et al to justify the different levels of publicness David Long and Frances Woolley (2009, p.108) are not convinced by the argument. They maintain that "the attempted manipulation of the concept

ignores its fundamental incoherence, its mixing together of the distinct concepts of nonrivalness and nonexcludability." Instead the authors suggest the concept of GPGs would be better understood as a rhetorical device rather than an analytical tool. Time would be better spent using the theory of externalities and by advancing "the specific analysis of nonexcludable and nonrival goods in the international system without the distraction of the rhetorically attractive, but practically marginal, example of global public goods." (Long and Woolley, 2009, p.119)

A wider remit for Global Public Goods

Nonetheless work has continued to ascertain the usefulness of the GPG concept. In addition to the work completed by Kaul at the UNDP and in response to concerns for the environment, security, health and governance, France and Sweden, with financial assistance from Germany, the UK and Norway, established and funded the International Task Force on Global Public Goods, which delivered its report in 2006.

The task force identified five priority GPGs; preventing the emergence and spread of communicable diseases, tackling climate change, enhancing international financial stability, strengthening the international trading system and achieving peace and security, which it argued underlies and is essential to all the others. In addition, it examined the cross cutting issue of knowledge.

All these issues, even taken individually, are complex and challenging. Nonetheless the task force called for the creation of a Global 25 forum, of heads of state and government from developed and developing states, to show catalytic leadership. However, without such a forum, which has not to date been established, it was recognised that “it will be extremely hard to achieve the reforms to international policies, institutions and financing necessary to achieve common goals.” (International Task Force on Global Public Goods, 2006b, p.14)

Intergenerational dimension of Global Public Goods

It may be difficult to argue for the financing of GPGs if they are seen as benefiting people in other parts of the world, especially for democratically elected politicians concerned with short-term electoral gains at home. Therefore the case to be made for funds to provide GPGs to support generations yet to be born is even more problematic. Yet, this is the argument put forward by Todd Sandler (1999, 2001, 2009) as he examines the provision of transnational intergenerational public goods (TIPGs). In relation to climate change negotiations he argues that there has been a lack of progress because “action taken and paid for today is unlikely to have a noticeable consequence until many decades into the future. Most policymakers are not sufficiently farsighted or altruistic towards future generations to worry about the long run.” (Sandler, 2001, p.16)

Actions taken through treaties or other collective action mechanisms can generate benefits into the distant future (Sandler, 2009). This is relevant in a range of areas, including climate change negotiations and also in preserving natural habitats and cultures, accumulating knowledge and eradicating pests and diseases. However to argue against short-term gains in favour of long-term benefits is challenging. In the provision of some public goods there may be short-term losers, who will argue against legislation to limit their actions now in favour of later generations. For example business people profiteering from logging in the Amazonian rainforest would argue against legislation to protect the habitat or farmers at higher latitudes benefitting from longer growing seasons may not favour of strong action on climate change.

Francisco Sagasti and Keith Bazanson (2001) argue that the growing prominence of issues that can potentially affect most of humanity and future generations is changing the manner in which development co-operation is achieved and financed. However, they recognise that this is one of the most contentious aspects of GPGs. It can often be difficult for a good, which may be seen as desirable, to make the transition to recognition as a GPG. Initially the benefits and costs have to be calculated, and this may depend upon who is to benefit and who is to pay, and then collective agreement and action taken within the international community. Those living in poverty, although large in number are limited in influence, and those yet to be born have no voice at all, making them even easier to ignore.

The balance between public and private

The diverse range of actors now operating in the international development arena is a key consideration in the provision of goods as highlighted by Alula Berhe Kidani (2015). With this proliferation of actors, state and non-state, from emerging economies to well-financed philanthropic foundations and international non-government organisations to multinational corporations, the balance between public and private is shifting.

Kaul and Mendoza (2002d) argue that the definition of public and private cannot automatically be made based on the original properties of a good. No longer can it be assumed that private goods are provided by the markets and public goods by the state. Increased privatisation, economic liberalisation and technological advances have all helped the markets expand and become more integrated across national borders. This has created a more complex situation between the public and private sphere, blurring the lines as some goods straddle the boundaries, or shift from one category to the other.

As both private and public goods are required there needs to be a balance between states and markets; two of society's principle mechanisms for co-ordinating economic activity, and also themselves public goods. And as both states and markets provide both private and public goods there needs to be a new expanded definition of public goods to "those that are nonexclusive – that is, de facto public in consumption" (Kaul and Mendoza, 2002d, p.80). They

argue that the general public, engaged through the political process, should be involved in making the decisions on what should be private and what should be public and how to pay for the goods provided, rather than leaving it to the markets.

Private goods also often rely on the provision of public goods. Drahos (2005) argues that rules, regulations and institutions such as the rule of law, contract law, recognition of property rights, secure banking structures and functioning stock exchanges are all required. “A flourishing capitalism equipped with such institutions allows entrepreneurs the freedom to act and to create the spontaneous ordering that is said to characterise markets.” (Drahos, 2005, p.58) If capacity is limited, for example as seen in developing countries, which may lack sufficient levels of the primary public goods required, such as rule of law, educational standards or scientists, this will impact on their ability to generate the private goods.

In addition to their inability to provide the public goods in the domestic setting, which in turn inhibits the provision of private goods, developing countries may also lack the capacity to represent their best interests at the international level and thus limit themselves further. Drahos argues that mechanisms of power and coercion are fundamental to understanding the provision of public goods. This is demonstrated in the concerted effort made by businesses in the US and the EU to lobby for the introduction of Trade-Related Aspects of Intellectual Property

Rights (TRIPS) into international trade agreements under the World Trade Organisation (WTO). Through the implementation of TRIPS states have had their ability to provide public goods eroded. TRIPS have also shifted the balance between public and private, arguably placing many elements of what was once public property, such as seeds and knowledge, into private ownership on a larger scale than ever before.

Many have raised concerns over the long-term impact this will have on developing countries and their people (Tansey and Rajotte, 2008; Maskus and Reichman, 2005; Commission on Intellectual Property Rights, 2002). Maskus and Reichman, (2005, p.xiii) argue that the strengthening and harmonisation of intellectual property protection has created a globalised regime of private rights that "will have profound implications for the nature of such processes as innovation, technology transfer, market competition and economic development." They also argue that "It also raises essential and sometimes disturbing questions about potential impacts on the ability of governments to provide critical public goods, both within and across countries." The impact that TRIPS may have on food security, through the control of seeds and knowledge, is of particular interest in this thesis and will be examined further in a later chapter.

Despite concerns centred on TRIPS some argue that there are benefits to the implementation of public-private-partnerships (PPPs) as tools of international

governance (Borzel and Risse, 2002). The authors examine the potential for such partnerships to strengthen overall governance by solving many of its deficiencies, most notably by increasing effectiveness and legitimacy, through rule and standard setting, rule implementation and service provision.

The provision of Global Public Goods

GPGs can be provided in a number of different ways, each dependent upon the type of good required. Each different method faces its own challenges; in addition to the problem of free riders states may be reluctant to relinquish some of their sovereignty, as well as specific problems with the provision of GPGs, such as that of the weakest link, externalities, additionality and the need for aggregate efforts. International organisations can play a role in providing an arena in which to discuss the provision of GPGs and how this is financed and the burden shared. Nevertheless international cooperation is difficult to achieve for a number of reasons.

State Sovereignty

The anarchic state system creates a situation in which there is no overarching authority to coerce individual states to take action. Governments, especially those in democratic states, have an immediate responsibility to their electorate but not necessarily people beyond their borders. However many actions taken by individual states can impact on other states and their people. These externalities may be positive or negative; goods or bads.

The International Taskforce on Global Public Goods (2006a, p.3) argues that state sovereignty is the main obstacle to a co-ordinated approach to many challenges facing the international community as it “weakens the prospects for cooperation by adding a degree of uncertainty to most international agreements. This basic problem underlies all the others.” States have differing preferences and priorities, with short-term interests driving many decisions and contributing to a lack of political will at the domestic level to cooperate at the international level. Even if the overall long-term benefits of a public good may be recognised the short-term actions to be taken may be disputed, especially if a state has higher short-term preferences and priorities. This is most evident when there is a financial cost to its provision.

The Weakest Link

Some GPGs can only be provided if all states play their part and fully comply with the common approach. Success can be eroded by a single act of non-compliance, which means that the overall action is only as strong as ‘the weakest link’. This creates problems for long-term cooperation as states have to be persuaded to provide the necessary investment in the good, through a clear understanding of the risk of failure through non-compliance, but each state also has to have reassurance that all other states will also play their part in its provision too. For example, a combined effort to eradicate a communicable disease is required across borders, and if one state fails to fulfil its commitment

the actions of all the other states, however successful on an individual level, will be compromised.

In contrast to the weakest link scenario there are some GPGs that can be financed by one country, or one country aided by others but with one country taking the lead. The example given by Barrett (2007) for this 'single best effort' is the defence of the world against an asteroid strike. Even if only one country were to finance the expedition the whole world would benefit from that effort.

Aggregate Efforts

The combined efforts by all states are required to combat some challenges. The implementation of the Montreal Protocol (UNEP, 1987) is an example of the successful provision of a GPG through 'aggregate efforts'. The Montreal Protocol came into force in January 1989, with the worldwide ambition of eliminating the consumption of ozone depleting substances. By 2006 the 191 parties that had ratified the treaty had, in aggregate, reduced their consumption of these substances by 95 per cent (UNEP, 2007). By 2009 it was the first United Nations treaty to achieve universal ratification and consumption of 98 per cent of all controlled substances had been phased out (UNEP, 2009). It was successful for a number of reasons, including the trade provisions it contained, which limited signatories to trade only with other signatories, a sense of

common threat that established a common purpose, and the implementation of a non-punitive compliance procedure.

In addition, the Montreal Protocol introduced a number of innovative principles, which are now common practice in international treaties, such as the 'precautionary principle',[9] which allows for action to be taken even when the science is not yet conclusive. It also introduces the concept of common but differentiated responsibilities (CBDR),[10] which is particularly relevant in climate change negotiations as it allows for developed countries to bear the bulk of the responsibility for tackling climate change due to their historic emissions and greater financial resources.

Enshrined as Principle 7 in the Rio Declaration on Environment and Development (UNEP, 1992) the principle of common but differentiated responsibilities (CBDR) has been used in the Kyoto Protocol (IPCC, 1997) and has been included in the Rio+20 outcome document, *The Future We Want* (UNGA, 2012) designed to be the mandate for the Sustainable Development Goals (SDGs). The Group of 77 and China have advocated for it to become an 'overarching principle' in the SDG framework. However, despite its success in

[9] The Montreal Protocol on Substances that Deplete the Ozone Layer was agreed on 16 September 1987 and came into force in 1 January 1989. It featured a unique adjustment provision that enabled it to respond to new scientific information quickly with the use of adjustments which when agreed were automatically applicable to all countries that had signed the original agreement. (UNEP, 1987)

[10] The principle was used to strike a political compromise in the United Nations Framework Convention on Climate Change in 1992 (UNEP, 1992)

the Montreal Protocol, this move has not been universally welcomed. Alvin Leong (2014, p.1) argues “many developed countries object to such inclusion and take the position that CBDR is a principle that is limited to the field of environmental protection, and thus cannot be an ‘overarching principle’ for goals that seek to integrate the economic, social and environmental dimensions of sustainable development.”

Nonetheless the principle of common but differentiated responsibilities was seen as a major contributor to the success of the Montreal Protocol as by agreeing to take on a larger proportion of the financial burden the developed countries were able to assist developing countries through the implementation of the Multilateral Fund. Financial assistance was made available to developing countries to assist in the removal of ozone depleting substances from use and enabled all 142 developing countries to meet the 100 per cent phase out mark for ozone depleting substances by 2010 (Rae and Gabriel, 2012).

Notwithstanding the success of the Montreal Protocol this level of cooperation and commitment is unprecedented. This level of success can, in part, be attributed to the fact that there were clear achievable goals set as part of the protocol; the phasing out of ozone depleting substances created a straightforward objective, whereas agreeing and then implementing policies to address climate change is very complex and politically sensitive. It is difficult to reach agreement on what should be included in an international treaty,

especially those concerned with climate change mitigation. Barrett (2007) argues this is because different countries are affected by climate change in different ways, with the poorest countries likely to be worst hit. Unfortunately it is these countries that can least afford the financial burden of mitigation measures. However, it is through the aggregate effort of all countries that climate change will have to be addressed.

Externalities

The impact of climate change demonstrates the challenges posed by externalities in the production of a good if the costs or benefits are not reflected in the price. In this instance the direct cost of the good is transferred away from the organisations responsible for creating them and so there is no incentive to address the situation or add this calculation into the final cost of the good. These externalities can be good or bad. Christopher Stone (1994) highlights the fact that even if goods, or services, have been privatised the external effects may still be displayed far from the geographical area in which they were produced, in a negative or positive way. For example a negative impact of warmer wetter weather, as a result of climate change, maybe the spread across borders of malaria carrying mosquitoes. Whereas, trees planted in one area may prevent flooding elsewhere. He argues that environmental inputs are incorrectly priced and therefore not valued, such as water, which is generally

underpriced and as a consequence over-consumed and waste storage not priced correctly and thus often contributing to pollution.

The creation of the Multilateral Fund in the Montreal Protocol is an example of a situation where the externalities have been taken into consideration. It demonstrates an acknowledgement by the developed states that they had disproportionately benefitted from producing harmful greenhouse gases through their processes of industrialisation and the developing states had in many respects borne the consequences but been unable to mitigate them.

Despite this positive example the majority of externalities are not taken into consideration. Francisco Sagasti and Keith Bezanson (2001) argue that the fractured global order created through globalisation has increased the speed and broad reach of cross border externalities. The authors maintain (2001, p.iii) that an international response is required: “As the actions of one or more agents (governments, corporations, association and even individuals) create costs or benefits for other agents not party to the transaction and located far beyond national, institutional boundaries – and even across generations – narrowly construed domestic and local policy responses are clearly insufficient.”

It is this concerted effort that is required to address the wide-reaching challenges created by externalities, of which climate change is only one example. Kaul (2005, p.8) argues that extreme poverty may create “direct

externalities such as the risk of failing states, exacerbated political turmoil and conflict, spread of communicable diseases, or interruption of commerce and investment flows." The aggregate efforts of the international community will be required to address poverty in all its complexity, and thus prevent these public bads from spilling over borders and across generations. How to achieve the eradication of poverty has been at the centre of the development agenda for decades, with different policies implemented in different areas achieving mixed levels of success.

The problem of free riding is closely linked to externalities and is a problem inherent in the concept of GPGs according to Daniel Bodansky (2012). He argues that if states cannot be excluded from receiving the benefits of a GPG, then that good will be under-provided. Conversely, if a GPG is bad and produces negative rather than positive externalities, it tends to be over-provided.

The complex nature of externalities, even if a clear link can be made between an action and a consequence, means that they are serious challenges to the provision of GPGs. In addition the lack of incentive to remedy an issue, whether that's the provision of a good, such as healthcare to stop the spread of a communicable disease, or a bad, such as a reduction in pollution that has crossed a state's border, acts as a further disincentive for action, especially when that action requires financial commitment.

The Principle of Additionality

Resources for the financing of GPGs can come from a number of different sources, both public and private. Not-for-profit organisations, such as foundations, large International Non Government Organisations (INGOs), and academic institutions can all provide private resources. Government agencies, International Financial Institutions (IFIs) and funds from other international organisations can also provide funds.

All these organisations are accountable to someone, whether that is an electorate or donors, and the financial support they give to provide GPGs has to be generated in some way. The concern raised by Sagasti and Bezanson (2001) is the issue of additionality; the source of the funds. The authors ask if the funds are going to be additional funds to the development aid already provided or merely redirected funds. They argue that: “Advocacy of financial resources for global public goods may end up reducing the amount of ODA [Official Development Aid] available for the national development priorities of developing countries.” (2001, p.17) The authors argue that to prevent this from happening there will have to be clear identification of the separate resource streams, differentiating GPGs from those for traditional development assistance programmes. This would create information reporting and statistical challenges, which in turn would require public funding to address.

Maurizio Carbone (2007, p.179) also highlighted problems with additionality arguing that: “Resistance has come both from developed countries, which question the issue of additionality, and from developing countries, which raise the issues of diversion of resources and the international decision-making process.” These are serious concerns, which highlight the difficulties in the provision of GPGs. The question of who will pay for the GPG is central to the debate.

Food Security as a Public Good

The production and distribution of food is, arguably, an entirely private enterprise. However, some elements of the food system do come under the auspices of public goods theory, and are indeed global public goods. Food is grown on land, which in many places, is in private ownership; but this is not always the case. Many tribes in sub-Saharan Africa, for example, still operate a communal land system which allows for communal grazing of livestock. This traditional method of farming is now increasingly under threat as land is being taken over by agribusinesses and the original inhabitants are being removed. (Pearce, 2012)

The production of food may originate from private means but the end result, a well fed population, which includes people who have benefited from adequate nutrition to optimise their physical and mental development, is a public good. As individuals and as members of society, well fed people are more active and

more productive. Research has shown that poor nutrition leads to stunting (FAO, 2013h; UNICEF, 2013; Grantham-McGregor et al, 2007). This leads affected children to be smaller than their non-stunted peers, susceptible to sickness, achieve lower attainment levels at school, have lower incomes in adulthood, and be more likely to become overweight as adults as well as more prone to non-communicable diseases. UNICEF (2013, p.iv) argues that stunted children cannot reach their full potential and that “stunting is associated with suboptimal brain development, which is likely to have long-lasting harmful consequences for cognitive ability, school performance and future earnings. This in turn affects the development potential of nations.” In response to this issue there is now a move to Scale Up Nutrition in the first 1,000 days of a child’s development, which includes the nine months before the child is born and its first two years of life.

According to Sally Grantham-McGregor et al (2007) there are over 200 million children under the age of five years that are not fulfilling their development potential due to poverty, poor health and nutrition and deficient care. As a consequence they are likely to do poorly in school, subsequently have low incomes, high fertility and in turn provide poor care for their own children and thus contribute further to the intergenerational transmission of poverty. The authors argue that in countries in which a large proportion of children are in this situation the development of the state as a whole will be detrimentally affected.

The main thrust of their argument is that disadvantaged children in developing countries are less likely to be productive adults. As a result of their research, looking at stunted and non stunted children both in poverty and not, the authors estimate that “the loss in adult income from being stunted but not in poverty is 22.2%, the loss from living in poverty but not being stunted is 5.9% and from being both stunted and in poverty is 30.1%.” (Grantham-McGregor et al, 2007, p.4) For all the 219 million estimated disadvantaged children in the world the authors calculate that the average deficit in adult annual income will be 19.8%.

Stunting is a major contributing factor to an individual’s limited life chances. This not only impacts upon the individual but also their community and the state as a whole in terms of productivity, the need for additional resources from the state, such as healthcare, and the transmission of poverty and poor nutrition to the next generation. Therefore, a well-fed population is clearly a public good.

To ensure the provision of a well-fed population there has to be enough food, which is of sufficient quality to ensure good health. However, the provision of such is complex. Food and agriculture are too important with too many diverse challenges to be left to the markets, argues Wanki Moon (2011). The author examines the relationship between free trade and agriculture, taking into consideration agriculture’s distinctive features of multifunctionality, its different roles across different countries and its association with the provision of three vital GPGs; mitigation of climate change, sustainability and food security.

He argues that free trade is incompatible with food and agriculture, as “farm policies designed to address the nature of agricultural public goods will affect comparative advantages and liberalised trade has implications for sustainable use of natural resources (land/soil, water), food security in LDCs [Less Developed Countries] and mitigations of and adaptations to climate change.” (Wanki, 2011, p.14) He argues for a global system that rewards states that regulate farmers to ensure the practice of sustainable agriculture as at the present time there is no incentive for farmers to voluntarily internalise the externalities associated with unsustainable production techniques, which may have a negative impact on the land for future generations.

The reduction of trade barriers can also raise the risks of marginalisation for countries, which due to many different reasons, such as resource endowment, location, size or lack of skills, may not be as competitive in the global market. The FAO has noted additional risks and argues that through globalisation “instability in the international financing systems and fluctuations in the performance of the major world economies have knock-on effects in countries that have become heavily dependent on external trade and investment.” (FAO, 2002b) Written at the beginning of the twenty-first century this became all too apparent during the 2007-08 global financial and food price crises.

Agriculture produces both public goods, most notably food, but also public bads, including greenhouse gases (Wanki, 2011; Romstad, 2002). The balance between the two depends on the production methods used. Industrialised agriculture is characterised by high usage of both energy and chemicals, intensive management and promotion of monocultures, which limit product and environment diversity. These methods can lead to many problems, including but not confined to the depletion of non-renewable resources, soil degradation, and overuse of scarce water supplies, as well as negative consequences of chemical usage for human and animal health and the environment.

Sustainable agricultural methods are more likely to lead to the provision of public goods, which may be highly valued by society but which cannot be secured by the markets, and are therefore either over-exploited or under-provided. Tamsin Cooper et al (2009) highlight a wide range of environmental public goods associated with agriculture, including agricultural landscapes, farmland biodiversity, water quality and availability, soil functionality, climate stability in terms of reducing greenhouse gas emissions and carbon storage, air quality and resilience to flooding and fire. They also highlight more social public goods such as food security, rural vitality and farm animal welfare and health. The authors (2009, p.2-3) argue that food security is a public good with distinct private characteristics and “although markets are the best regulators of food supply, there are hazards arising from a potential shortfall in supply that do not

arise with other commodities less central to human welfare." This means that government action is needed to ensure access to affordable and safe food.

The FAO recognises "the importance of ensuring an adequate supply of global public goods to safeguard long-term global food security and the sustainable use of natural resources." (FAO, 2002b) The organisation calls for the conservation of global common goods, including genetic resources and oceanic fish stocks, whilst bringing attention to the global nature of the many challenges facing agriculture, forestry and fisheries. For example, pests and diseases do not respect national boundaries or oceans and cross both; actions in one area, such as high-intensity livestock systems and deforestation, can contribute to climate change; and over-fishing can have an impact on the livelihoods of fisher folk many miles away, as well as the impact felt by farmers in one region if agriculture is subsidised in another. (Weis, 2007; Murphy, 2013; Rogers, 2008b) The creation in 2001 of the International Treaty on Plant Genetic Resources for Food and Agriculture is an example of an international agreement designed to manage and conserve genetic resources in a sustainable way and as a GPG. This treaty will be examined in more detail in chapter seven.

Although the production of food is mostly a private enterprise there are significant elements within the realm of food and agriculture, and the provision of food security, which are GPGs. Agriculture produces both public goods and public bads, depending upon the type of agricultural methods used. (IAASTD,

2009; HLPE, 2015; De Schutter, 2014) Mechanisms that encourage the adoption of production methods that produce public goods, rather than bads, should be implemented to ensure enough good quality and nutritious food is grown in a sustainable manner. This is the only way to make sure there will be enough food to feed the world's growing population and to ensure this generation and those to come will benefit from nourishing and nutritious food so they can be active, useful and productive members of society.

A well-fed population is not only more productive and less likely to need as many health care services but it is also likely to be more stable, leading to less migration and less potential conflict. The provision of food security is morally sound and ties in with the founding of the United Nations, as the world emerged from the chaos of World War Two into a more ordered and just world. It is also in line with the foundational principles of the FAO, including the freedom from want, as inspired by Roosevelt's Four Freedoms (1941). This will be discussed further in chapter four.

Millennium Development Goals as Global Public Goods

The establishment of the Millennium Development Goals (MDGs) by the United Nations in 2000-01 can be seen as a commitment by the international community to work together to help provide GPGs, such as the prevention and treatment of communicable diseases. Kaul (2005) argued the best way of

achieving the MDGs was to use the available resources as efficiently as possible, promoting an adequate mix of private and public goods. Taking steps of a re-regulatory nature to reshape and modernise current international regimes, most notably those concerning multilateral trade, official development assistance and international financial institutions, would be cost-effective and deliver positive results, especially in meeting MDG 8, to develop a global partnership for development. It has to be noted that since Kaul's paper was written in 2005, when debt forgiveness was high on the international political agenda,[11] there have been significant and dramatic changes in the international financial system as a result of the global financial crisis. These have, in many cases, exposed the fragility of this interconnected system.

Richard D. Smith and Landis MacKellar (2007) argued that the use of the GPG framework was not the best way in which to approach MDG analysis; instead the MDGs should be interpreted in the context of traditional development assistance. In relation to the global health agenda there are only two areas in which the GPG concept can be used, according to Smith and MacKellar; health research and development[12] and communicable disease control. The authors

[11] The Make Poverty History Campaign was at its height in 2005 as campaigners attempted to persuade the G8 leaders at the Gleneagles Summit to forgive developing countries' debt (Longbottom, 2008)

[12] The authors argue that private for profit companies should be encouraged to engage in health research and development to benefit poor countries, rather than concentrating all their energies and resources on developing health products for the wealthiest people; the ubiquitous 90-10 problem, in which 90% of global R&D spending in health is targeted at diseases affecting only 10% of the world's population (Smith and MacKellar, 2007)

argue that the GPG concept has been over-used and therefore over-stretched and devalued.

Smith and Mackellar, argue that because the MDGs emerged from a profound dissatisfaction with the effectiveness of aid it was a response to a crisis in traditional development assistance and not a move towards collective action to supply GPGs. This difference in approach can be seen through the encouragement of country ownership, similar to that taken in the implementation of Poverty Reduction Strategy Papers. Smith and MacKellar argue (2007, p.6) that “far from encouraging donor-country voters to support generous foreign aid programmes because they are in their own interest, these discourage them from doing so.” Instead the GPG concept should be used to generate additional and innovative sources of funding to achieve the MDGs to which the label is relevant, such as communicable disease control, to mobilise rational self interest.

The dissatisfaction with aid effectiveness was not seen as the driving force behind the MDG framework, according to Sakiko Fukuda-Parr and David Hulme (2011, p.17), who argue that the creation of the MDGs was “the emergence of a broad consensus on ending poverty as the overarching objective of development.” The authors argue (2011, p.18) that each individual goal is its own norm and when brought together as a single package these goals were the “strategic components of the broader supernorm that extreme, dehumanising

poverty is morally unacceptable and should be eradicated." This evolution in development thinking had started in the 1990s, when both academic and policy instruments, were taking the idea of poverty as multidimensional, and which therefore required action on different dimensions simultaneously.

Some of the MDGs, such as creating global development partnerships, can be argued to be GPGs whilst others, including those relating to maternal mortality and child mortality, are not. Although it is desirable for ethical and moral reasons to combat mortality rates it cannot be argued to fulfil the GPG criteria, as there are no cross boundary implications if these issues are not addressed. However, a country or even a region's peace and stability may be jeopardised by a population unable to feed itself or generate sufficient income on which to survive. Despite the debate on the validity of the GPG concept in the analysis of the MDGs the efforts that have been made to achieve the targets have had a positive impact on millions.

Although the MDGs have faced criticism (Harris and Provost, 2013; Clegg, 2015; Saith, 2006; Fukuda-Parr and Hulme, 2011; Gabay, 2011), which will be discussed in chapter five, and not all targets have been met, UN Secretary General Ban Ki-Moon argued that the measurable time-bound targets have established a blueprint for tackling the most pressing development challenges and have made a profound difference in people's lives. Targets have been met on global poverty reduction, access to primary education, communicable

disease control and infant mortality. This has meant that “[t]he likelihood of a child dying before age five has been nearly cut in half over the last two decades. That means that about 17,000 children are saved every day.” (Ban quoted in UN, 2014a, p.3)

The MDGs are also being used to pave the way for the Sustainable Development Goals (SDGs), first proposed at the Rio+20 Conference in 2012, which will cover a broad range of sustainable development issues (United Nations, 2015). Kidani (2015) argues that the setting of the SDGs is an opportunity to broaden the ‘locus of change’ to track development progress in industrialised countries with greater expectations placed upon them to deliver on sustainability within their own countries as well as supporting global development and securing GPGs.

Kidani, however, recognises the difficulties facing the international community in reaching agreement on the post-2015 framework. There are more actors engaged in the international development arena now than when the MDGs were created, with aid donors from a more diverse set of countries, philanthropic foundations playing a much larger financing role and increased participation from the private sector. In addition emerging economies are playing a more assertive role in global politics and many developing countries are in stronger positions of growth. Arguably this explosion in the number of different actors, and the diversity of their origins, interests and constituents, has created

additional obstacles to reaching agreement, both in the specific goals and objectives, and the methods to be used to achieve them.

Despite the potential difficulties in reaching agreement and buy-in from this diverse group of actors Kidani (2015, p2) argues that "[b]ased on the experience of the MDGs, the framework will likely play an important role in framing national and global policy and decision making for decades to come." To achieve success the goals have to be simple and limited in nature, have a robust monitoring mechanism, play a norm-setting role, respond to the changing global context and numerous long term challenges and be structured in such a way as to generate buy-in from a diverse range of countries and stakeholders.

International Organisations in the provision of Global Public Goods

As global public goods, by their very nature, transcend national boundaries there is a need for some type of organisation to coordinate efforts to provide these goods. The different types of goods require different types of responses from states and therefore the creation of different types of organisations. For example, the United Nations has many different types of bodies and specialised agencies, including the Security Council, which is designed to assist states in the provision of the GPG of international peace and security; the World Health Organisation to prevent the spread of infectious diseases and the UN

Framework Convention on Climate Change, to address climate stabilisation. (Shaffer, 2012)

Recent developments in the global economy, following the financial crisis and the rise of China as an economic power, have seen a change in the origin of financial assistance to development projects. According to Andrew Sheng and Xiao Geng (2015) China has taken the lead in establishing the Asian Infrastructure Investment Bank (AIIB). The authors argue that this will enable China to have a larger global leadership role and reflects its provision of GPGs. Infrastructure investment is seen as a major contributor to increased economic growth and as such China will, through various organisations including the AIIB, be investing an estimated $232 billion in two trade routes, the Silk Road Economic Belt and the Twenty-first Century Maritime Silk Road. This figure is comparative to two thirds of the World Bank's budget for 2014. However, it may be argued that these investments have less to do with the provision of GPGs as they do with ensuring China's economic supremacy, especially in Asia.

There is much debate, in the field of international relations, as well as the wider public as to the need for, remit of and the success of international organisations, such as international financial institutions, in the provision of GPGs. A short examination of the historical context of international organisations gives a brief overview of their emergence in the international arena.

International Organisations and their Historical Context

International treaties have been instrumental in establishing the relations between kingdoms, principalities and states for centuries. For example, the Treaty of Westphalia, signed in 1648, ended the Thirty Years War, and created the basis for the concept of state sovereignty (The Avalon Project, 2015). International organisations, however, did not make an appearance until the 1800s. Early examples include the Central Commission for the Navigation on the Rhine, which was established in 1815 to regulate shipping on the river, a vital trading route, between France and Germany (Klemann, 2013).

The second oldest international organisation is the Universal Postal Union (UPU, 2015), which was created at the Treaty of Bern in 1874 to address the complexity generated through the numerous bilateral agreements regulating postal services in place. “The 1874 Treaty of Bern succeeded in unifying a confusing international maze of postal services and regulations into a single postal territory for the reciprocal exchange of letters.” (UPU, 2015) Initially named the General Postal Union it was renamed the Universal Postal Union only four years later due to its large membership. It is now a specialised agency of the United Nations.

Clive Archer (1994) argues that the change in the political landscape, with the end of the Napoleonic Wars in 1814-15 and the revolutions in France and US, in

addition to economic and social developments, through industrialisation, internationalisation of commerce and improvements in communications, were all contributing factors to the introduction of international organisations. These developments had allowed the state to evolve as an entity, ensuring it was no longer completely tied to the monarchy. In the case of the UPU there was a clear need for the creation of an organisation to coordinate postal policies and services between countries, and so an organisation was established.

However it was in the twentieth century that the formation of international organisations became more widespread, most notably with the creation of the League of Nations after the First World War, and then the United Nations following the Second World War.

The League of Nations

Now remembered for its ultimate failure to prevent war the League of Nations was a multipurpose inter-governmental organisation with universal membership. It had three bodies, which had similarities to the bodies of the United Nations today; the Council, the Assembly and the Secretariat. Its main objective was to maintain universal peace, based on the fundamental principles accepted by its members to develop cooperation among nations and to guarantee them peace and security. (UNOG, 2015)

The Covenant of the League of Nations became part of the Treaty of Versailles and outlined several basic objectives that have since been assumed by the United Nations, such as the requirement to ensure collective security, which is directly tied to the security of member states; peaceful settlement of disputes through mediation, negotiation, arbitration and adjudication; and to foster international co-operation in economic and social realms. It was heavily influenced by the values of the US, with President Woodrow Wilson one of its champions and principal architects; and yet the US did not become a member of the League. (Allied Powers, 1920; Pease, 2003)

Initially the League of Nations was successful with the peaceful resolution of conflicts between Sweden and Finland and between Greece and Bulgaria. Despite these early successes it increasingly faced a number of serious challenges to its authority, most notably Japan's invasion of Manchuria in 1931, Italy's annexation of Ethiopia in 1935 and also with the annexation of Austria by Hitler in 1938 (UNOG, 2015). The start of World War Two in 1939 saw the beginning of end for the League, which officially ceased to exist in 1946 when the United Nations inherited some of its agencies, including the International Labour Organisation. There are many reasons for the League's failure. However, these are beyond the remit of this thesis.

The United Nations

As a successor to the League of Nations the United Nations has similar aims: to maintain international peace and security, to develop friendly relations among nations, to address economic, social, cultural and humanitarian problems and to promote respect for universal human rights (UN, 1945). Alongside its six principle organisations; the General Assembly, Security Council, International Court of Justice, Economic and Social Council, Secretariat and Trusteeship Council, there are several specialised agencies, which include among others the Food and Agriculture Organisation, the International Monetary Fund and the World Health Organisation, which form part of the overall system.

In addition to the UN there are other international organisations that fulfil a number of roles, such as the European Union, which is a comprehensive, multipurpose regional organisation. Like the United Nations it was created following the devastation of World War Two and has the overall objective of ensuring a peaceful, united and prosperous Europe. Since its creation it has grown in strength, size and remit. (Europa, 2015b)

Alongside these large bodies there is a plethora of other international organisations, both intergovernmental organisations (IGOs) and international non-governmental organisations (INGOs). According to the Union of International Associations (2015) there are over 37,000 active and 30,000 dormant international organisations in 300 countries and territories with

approximately 1,200 being added every year. This creates a diverse and ever-expanding array of actors operating in the international arena, which has implications for the ability to reach agreement and take action on international issues.

The ever changing International Arena

Since the creation of the United Nations in 1945 the international arena has undergone a number of substantial changes. In many instances these have been either multi-regional or global in scale and profound in nature. Since the end of World War Two the number of states has more than tripled through decolonisation and then with the break-up of the Soviet Union. (Jordan et al, 2001) The emergence of these nascent states has had a significant impact on the system of global governance and the United Nations itself, which now has 193 members (United Nations, 2015b.)

The world's population has also increased significantly, from 2.5 billion in 1945 to seven billion in 2013 (Trueba and MacMillan, 2013). And the level of integration and interdependence, through advances in technology, communications and transport, has created a globalised world. Operating within this world there has been an increase in the number and type of different entities; states, IGOs, INGOs, civil society associations and multinational corporations, which all vie for position. This has created a very dynamic and

complex international environment, which can be examined from numerous different theoretical perspectives, which will be examined in the next chapter.

Political, economic and social factors have also played their part. The Cold War saw the division of states between the ideologies of East and West, creating a situation in which new weak states aligned themselves with the US or the USSR to gain financial support. Thomas Weiss (2000) argued that this helped to maintain the state-centric status quo. However, following the financial shock of the 1973-74 oil price crisis, the subsequent structural adjustment programmes of the 1980s and the ideological shift towards market liberalisation, the concept of state sovereignty faced numerous challenges. Financial aid, made available through the International Monetary Fund and World Bank, was granted with conditions based on externally imposed changes to domestic policies. This erosion of the sanctity of state sovereignty became accepted and the norm as illegitimate regimes were challenged and developing countries and former Soviet Bloc states underwent waves of political reform, in addition to the emergence of a proliferation of non-state actors and through a number of humanitarian interventions. (Weiss, 2000) However, despite these challenges to state sovereignty many theorists argue that states still remain the primary units within the international system. This will be discussed further in the next chapter.

The Role of International Organisations within the International Arena

Within the international arena there has emerged a vast array of different actors, international organisations being just one type. It is only by examining the complex relationships between these different actors that an understanding of the changing role of international organisations can be gained.

Thomas G. Weiss and Annelies Kamran (2009) have examined the different roles that the many different actors play in the international arena, all of which are organised to achieve goals, all with different levels of legitimacy. The potential role of each actor depends on how an issue may be framed; how it's conceptualised. The authors (2009, p.70-71) examine this complex international arena through the lens of global governance, which they perceive to be "the complex of formal and informal institutions, mechanisms, relationships and processes between and among states, markets, citizens and organisations, both inter and non-governmental, through which collective interests on the global plane are articulated, rights and obligations are established and differences mediated." Five different components are emphasised by the authors; a transnational level of analysis, issues, non-state actors, dynamics of governance and the interdependent, yet loosely coupled complex international system.

The role of international organisations, however weak or inadequate, is integral to global governance. However the dynamics of the international system, with the complex relationships between states, international organisations, NGOs and other actors constantly being revised in response to changing global, economic, social and political circumstances creates a potential problem of remit for international organisations.

> *When most international organisations were created by member states it was not foreseen that they would be interacting with so many different kinds of actors at so many different levels in so many essential ways – so, oftentimes, there is only the vaguest of provisions in many of their charters and statutes for the range of interactions that global governance implies.* (Weiss and Kamran, 2009, p.76)

Although member states have established these international organisations there remains the need for ad hoc developments and co-operation between the various international organisations in pursuit of shared goals. This may pose potential statute problems, as the ever-changing dynamics of the international system demand flexibility within and among international organisations, but the authors argue it is crucial for problem solving.

The position of the state, as always, is central to any debate. There are two opposing views of international organisations, according to Robert Jordan

(2001), either the proliferation of international organisations is seen as a challenge to state sovereignty, a manifestation of the hopes of Wilsonian idealism and a paradoxical occurrence as states instigated their creation in the first place, or the power of the state is largely unaffected. The creation of an incipient global governance that may be seen as a “transformation in world politics, from the primacy of the national state to one in which international institutions provide the arena for conducting relations between states, urged on by necessity, design and desire (or some combination of the three)” (Jordan, 2001, p.1) has not emerged as the process is incomplete and there is a lack of clarity. Instead Jordan argues that the existing system based on distinct territorial units is not even questioned as the foundation for governance.

As states are viewed by many as the undisputed primary actors the legitimacy of international organisations to override the sovereignty of states may be open to challenge. Daniel Bodansky argues that the issue of legitimacy has not often arisen until relatively recently because the international organisations in question have been too weak to exercise any significant authority. However, there are a number of exceptions, most notably the creation of the WTO, with powers to penalise non-compliance, and the Montreal Protocol, with its ability to upgrade binding legislation when new scientific evidence becomes available without the need for further agreement from the signatories, as discussed earlier. Bodansky (1999, p.599) argues: “It is hard to imagine how problems such as global climate change will be successfully addressed, without the

eventual establishment of more authoritative international institutions to set standards and oversee compliance."

International organisations have to possess legitimacy and authority to be able to provide public goods according to Gregory Shaffer (2012, p.675) who argues that: "The most salient challenge internationally is that we lack legitimate, centralised institutions with general taxing and regulatory powers." International institutions, or organisations, can help to overcome collective action challenges, which naturally arise from a reliance on national decision-making, and problems associated with free riders. However, it is the remoteness from affected constituencies, which raise legitimacy concerns and in turn constitute a major challenge to the success of international organisations. Shaffer examines the provision of GPGs through three mainstream analytical frameworks in international law scholarship; constitutionalism, global administrative law and legal pluralism, each with attributes and deficiencies. He argues that there is no one single best approach but rather legal policy should be tailored to the type of GPG required.

Despite the significant increase in the number of international organisations in recent decades Olson (1971b. p.876) argued forty years ago that there were probably enough international organisations in existence then and that emphasis should placed on the level of co-operation given by national governments to the international organisations already in existence. He

suggested that “we should ask under what conditions independent countries will do what is needed to carry informal cooperation or formal organisation to a more optimal point.” However, even if international organisations were to acquire powers of compulsion these powers will have originated from the states in the first place; again placing states in the position of primacy.

States are arguably the primary actors but there is no one state in control. There is also no world government in place. It is this overall state of anarchy that creates even greater challenges for the provision of GPGs, Weiss (2000) argues. States are not in control, international organisations are not in control and the proliferation of NGOs and other organisations that have gained authority and legitimacy has undermined the already weak state-based collective action. Weiss argues that within this context the “problems associated with the provision of global public goods have become even more of a challenge, conceptual and practical, than in their provision in the national setting.” (Weiss, 2005, p.81) The difficulty in assessing the different relationships between these different actors will be examined further in the next chapter.

Conclusion

Since Samuelson’s examination of public expenditure the concept of public goods and the role of the state, in its domestic realm and within the international structure, has become more complex; a situation exacerbated as power between the public and private spheres has shifted through political balancing,

with the rise of neoliberalism, a subject to be discussed in the next chapter. Public goods theory is itself contested, as well as being intimately bound to the state, and so the move to expand the concept to the global level faces the challenges that public goods theory faces, including the categorisation of both pure and impure public goods, as well as the additional challenges of legitimacy in a globalised world.

If people are challenging the need for the provision of public goods in a national setting, in which there is a clear connection between the individual and the democratic government, there is little hope of securing a clear mandate for action at the global level. The legitimacy challenges already faced by international organisations, which arguably are not accountable to individuals, makes it even more difficult for them when making the case for extra funding for the provision of GPGs.

However, this is only one obstacle in many that needs to be overcome for their successful provision. Prior to this there has to be agreement as to the existence of the need, agreement on the categorisation of this need as a GPG and then agreement on the best way to provide it. It may be decided that there is a need but a belief that the markets are in a position to address it; this may not be the opinion of all. International organisations have to put forward a convincing argument that there is a need, that this need is a GPG and that they, as an international organisation, are in the best position to address the issue. Once

this level of agreement has been achieved the international organisation then has to create the best arena for its members and other bodies to reach agreement on how to tackle the issue and who will fund it.

When the UN was established in 1945, in the post-war world, there was a strong faith in the ability of states to protect their citizens and to improve their lives, the world economy was not as integrated, global corporations were only just emerging and the huge global capital market had not been foreseen. Since then the world has become more integrated, technology has quickened the pace of interaction and deregulation has created a more integrated global market. The provision of GPGs in this diverse and complex world is an even greater challenge than it was seven decades ago.

The next chapter will investigate the underlying theories of international relations; realism, neo-realism, liberalism, neoliberalism, constructivism and cognitivism with particular reference to the creation of international regimes, their scope and remit, as well as the sources of power during their creation and throughout their existence. The relationship between regimes and international organisations will be examined before an investigation into the changing international system within which they operate.

Chapter Three:
International Organisations within the International System

Introduction

International organisations, such as FAO, operate within an international system that comprises political, economic and social spheres. There are a number of theories that attempt to explain the interaction between the different actors, including states, international organisations, non-state actors and individuals, within this international system. These theories can be incredibly influential if they are accepted and then implemented through policies at the national and international levels. For example, the ideology behind neoliberalism, which promotes liberalisation, deregulation and privatisation, has been dominant since the 1980s and has changed the world in many different ways.

This chapter will begin by briefly considering the six main theories of international relations, realism, neo-realism, liberalism, neoliberalism, constructivism and cognitivism, as related to regime theory. From these six it is possible to draw out four key themes addressed by them all; the identity of the main actors, their level of autonomy, the interdependence within the international system and the importance of information and its providers. These four key themes will be used in later chapters to examine the roles that FAO performs. This chapter will then conclude with an examination of the wider

international context within which FAO operates, from the era of regulated capitalism from post-war to the early 1970s and from the early 1980s until the present, the neoliberal era.

Main Theoretical Approaches

The main theories developed to explain the actions of states, including their creation of and then interaction with, international organisations; realism, neo-realism, liberalism, neoliberalism, constructivism and cognitivism, have developed over decades. Many agree on certain aspects of the international system, such as the concept of anarchy, but differ on the motivations, sources of influence and level of analysis.

Realists believe that states are the principle actors in an anarchic system, and as such act as rational autonomous actors in pursuit of their own self interests with the primary goal of maintaining their own security. The balance of power keeps order. John Mearscheimer (2001) has investigated the behaviour of states within the international system, and in doing so has outlined five assumptions: the anarchic nature of the system, great powers inherently possess offensive military capabilities, states can never be certain about other states' intentions, survival is the primary goal of great powers and they are rational actors aware of their external environment and as such act accordingly.

Any one of these assumptions taken in isolation may not be enough to promote aggression, “taken together, however, they depict a world in which states have considerable reason to think and sometimes behave aggressively.” (Mearscheimer, 2001, p.54) As all states are striving for hegemony and taking these five assumptions together Mearscheimer argues three general patterns of behaviour result: fear, self-help and power maximisation. As a state level theory, realism focuses on the need for states to seek power, in a military sense, and relative to other actors in the international system.

Neo-realism develops the core principles of realism, states as the principle actors operating in an anarchic system, but argues that the cause of all power struggles and rivalries is as a result of the nature of the international system, not the nature of the state. Kenneth Waltz (1979, 1993) takes this systemic approach and also challenges the traditional realists’ emphasis on military power; instead he recognises that power can be seen in terms of combined capabilities. Waltz defines a system as, at one level consisting of a structure and at another level consisting of interacting units, with the aim of systems theory to show how the two levels operate and interact.

With its foundations in idealism, liberalism is a state level theory that acknowledges economic and cultural aspects of relations between states, and not just those concerned with politics and security. Instead of seeing the system as completely anarchic theorists cite the number of interconnections, the

interdependence and the co-operation that exists between states, international organisations and other actors, which creates a web of connections. It also brings into the equation the concept of values.

Taking Immanuel Kant (1795) as his starting point Michael Doyle (1983, p.213) sets out his democratic peace theory, which argues that "there exists a significant predisposition against warfare between liberal states." As citizens of liberal states enjoy the three liberal rights; freedom from arbitrary authority, social and economic rights and the right to democratic participation or representation, this is then translated to the international level. It then holds that state sovereignty is a basic tenet of liberal international theory. It also has implications for wider exchanges between individuals, beyond the mere political or security levels. Doyle (1983, p.213) argues that "when states respect each other's rights, individuals are free to establish private international ties without state interference." This applies across a wide range of activities from trade relations to educational provision.

However, Markus Fischer (2000, p. 1) argues that although "war is almost unthinkable among the democratic nations of the west" this is more to do with democracy than liberalism, as there is a clear distinction between the two concepts. Fischer does acknowledge the significance of the democratic peace argument for "it suggests nothing less than suspension of anarchic constraint –

the fact that fear induces every state to perceive all others at least as potential enemies." (Fischer, 2000, p.1)

As a system level analysis neoliberalism focuses on the way in which institutions influence the behaviour of states by championing values and promoting certain behaviour through the implementation of rules. The system is still perceived as anarchic and state-centric but rather than pursuing relative gains to other states, in a zero-sum game, states should instead be concerned with absolute gains. Robert Keohane (1984, 1994, 1998, 2005) investigates the roles that international institutions play. He argues that "institutions create the capability for states to co-operate in mutually beneficial ways by reducing the costs of making and enforcing agreement." (Keohane, 1998, p.86) Institutions can reinforce practices or reciprocity and provide incentives for governments to keep their commitments to ensure others do. Even superpowers need general rules as the cost of attempting to exert their influence bilaterally would be too great. However, the US, even as a superpower, does not necessarily rely on the UN system to gain its influence; instead organisations such as NATO are used to great effect. The rise of neoliberalism as an economic and political system will be discussed in the second part of this chapter.

Through the concept of 'structure of identity and interest' Alexander Wendt (1992) develops the notion that states will act towards other states on the basis of the meaning that an object, in this case another state, will have for the state.

This is similar to how individuals act towards external objects. This is highlighted by a state's behaviour towards another state, as a friend or enemy. He argues that the concepts of anarchy or the distribution of power do not explain this distinction but a 'distribution of knowledge' that depends on inter-subjective understandings and expectations, does offer an explanation. Wendt calls for a constructivist approach as he sets out his argument for the social construction of power.

Norms play an important part in constructivist theory, as Martha Finnemore (1996) argues through her examination of the reasons for humanitarian intervention. Her examples include military actions to deliver humanitarian assistance in Bosnia, Cambodia and Somalia; however the international political landscape has changed since September 2001. Nonetheless her argument is still valid as she recognises that actions have to be understood in a changing normative context. This constructivist approach does not deny the importance of power or interest, the central principles of realists and neoliberalists, but instead argues for a more in-depth analysis of these two principles, to determine the actual interests involved, and the ends to which and the means by which power will be used.

The realist heritage of both realist and neoliberal theories are criticised by cognitivists that challenge the assumption that states are rational actors, which are inherently static entities that do not learn. Instead cognitivists, both weak

and strong, believe that the positivist methodology of the realist-based theories do not take into consideration how social norms work. Both strands of cognitivists are knowledge-based theories with their attention “focussed on the origins of interests as perceived by states, accentuating the role of the normative and causal beliefs of decision-makers.” (Hasenclever, Mayer and Rittberger, 1996, p.206)

Weak cognitivists have three assumptions that form the foundation of their theory: interpretation based on knowledge that shapes perceptions of reality, the importance of intersubjectively shared meanings and the growing demand from decision-makers for scientific or alternative authoritative information to reduce uncertainty. Peter Haas (1993) argues that actors’ interests cannot be taken as a ‘given’ as interpretation, based on the knowledge held by actors, shapes their perception of reality. Interests should be treated analytically, taking into consideration the actors’ understanding of the natural and social world. This will allow for the establishment of share meanings. Haas (1992, p.29) argues that: “Before states can agree on whether and how to deal collectively with a specific problem, they must reach some consensus about the nature and scope of the problem and also about the manner in which the problem relates to other concerns in the same and additional areas.” This is essential for any progress to be made on collective action, including the work of an international organisation.

To assist decision-makers in finding an intersubjectively shared meaning scientific or another source of assumed authoritative knowledge is required. This can be provided by the epistemic communities. These networks of professionals offer expertise in policy-relevant knowledge, they share a common understanding of particular problems and potential solutions and they often operate trans-nationally.

Strong cognitivists offer a more radical critique of mainstream rationalist theorists and embrace a more profound institutionalism/institution-centric approach. They challenge the basic assumptions of both the realists and neoliberals that the interests and powers of state actors should be the starting point for analysis. Instead they focus their attention on the analysis of normative structures in their own right.

Regime Theory as a Framework of Analysis to Examine FAO

FAO is an ideal candidate to be the subject of an analysis using regime theory, as an international institution working within the international system, and as a specialised agency of the United Nations. Regime theory can be used to critically examine its evolving role and changing relationships with its member states.

Analysing the behaviour of states within the international system has been the mainstay of many scholarly endeavours, from Krasner (1983) and Keohane (1993) to the twenty-first century with the examination of the complexities of the regime system (Davis, 2009; Alter and Meunier, 2009; Ward, 2006; Skjaerseth and Wettestad, 2002). Initially it can be argued that there are a number of similarities between the three main schools of thought: interest-based, mainly neoliberal theories; power-based, realist theories; and knowledge-based, cognitivists, both weak and strong. All take the state, admittedly in varying degrees, as the main actor, and accept that regimes and institutions are important in formulating behaviour; and yet there are differing opinions on actors' specific roles and motivations or the nature or level of the influence of institutions.

The mainstream in this field are those concerned with interest-based theories, both neoliberal and institutionalists. It can be argued that these theorists place their liberal ideals, including their belief in common interests and that institutions are able to facilitate co-operation between states, upon realist assumptions, such as the supremacy of the state within an anarchic international system in which states act rationally driven by their own interests (Hasenclever, Mayer and Rittberger, 1997). This acceptance of realist assumptions has drawn criticism from cognitivists.

Unlike the interest-based theorists and cognitivists, realists do not accept the complete autonomous nature of regimes or institutions; however institutions are seen as potential sources of power. Realists are concerned with the distribution of power, arguing that states care about relative gains, thus making co-operation more difficult. Even so weaker states may gain from co-operation, and therefore enjoy increased levels of power and influence within institutions, depending on the circumstances. For example, the voting system in FAO is based upon a one member one vote system, rather than weighted voting as implemented by the international financial institutions.

Nonetheless the predominant traditional realist model, hegemonic stability theory (Kindleberger, [1973] 1986), argues that there is no substitute for a strong hegemon within the system. It can be argued that the role that the United States played, especially in the early development of FAO, was that of a hegemon keen to protect its own autonomy and position. This will be discussed further in the next chapter. Krasner (1993) offers an alternative realist model to counter hegemonic stability theory when he calls for a power-orientated research programme to examine the relative gains and losses of actors. Regimes are seen as distributors of power and interests, through which the players, game rules and pay-offs are decided by those with power.

Although states will not allow institutions to become significant autonomous actors they are not viewed as empty vessels. Koremenos, Lipson and Snidel

(2001, p.762) argue that: “states spend significant amounts of time and effort constructing institutions precisely because they can advance or impede state goals in the international economy, the environment and national security. States fight over institutional design because it affects outcomes.” As far as realists are concerned regimes may not be powerful in their own right but instead can be instruments used to distribute power and influence, especially if designed by the powerful in a way to suit their own needs.

As a sociological-based theory cognitivism sets itself apart from the rational theorists in a number of ways, from challenging the assumed pre-eminence of the state-centric model to the level of autonomy regimes and institutions are regarded to possess. Strong cognitivists also go so far as to challenge the foundational positivist methodology used by both rationalists’ theories. (Hasenclever, Mayer and Rittberger, 1996) Interpretation based on knowledge, which shapes perceptions of reality; the importance of intersubjectively shared meanings, based on a minimum of collective understanding; and the demand for scientific or other authoritative information required by decision-makers, are the three assumptions that form the foundation of the weak cognitivists’ theory (Haas, 1993). All three assumptions are interlinked and highlight the crucial role played by networks of professionals, termed epistemic communities, which provide expertise in policy relevant areas.

Key Themes and their impact on FAO

All three schools of thought within regime theory are concerned with four interlinked key themes: the identity of the main actors, whether state or non-state entities; the level of autonomy enjoyed by regimes or institutions; the interdependence of states and other actors within the international system; and the level of importance granted to information, and communities that provide it.

Main Actor Identity

In the first of the four key themes addressed all the theorists identify states as the main actors within regimes and institutions. This realist assumption is accepted readily by interest-based theorists but is at least partially challenged by cognitivists, who recognise other actors as players, such as epistemic communities, and argue that different interests are difficult to assess within the complex international system (Hasenclever, Mayer and Rittberger, 1997).

In the traditional theories a number of influential non-state actors that operate within the international system are not sufficiently taken into account, from multinational corporations and hedge-fund managers to civil society and non-government organisations. These non-state actors can be easily identified within the food and agriculture sphere. Although not members of FAO, they nonetheless exert influence on the global food system, be this through the provision of seeds, fertilizers and pesticides to the world's farmers, speculation in food commodities on the global markets, or organised action by farmers or on

behalf of farmers, or other interest groups, such as consumers or environmental activists. These non-state actors, although influential, have existed on the periphery of the global governance system but this situation is changing through the reform, which started in 2009, of the FAO's Committee on World Food Security. This will be examined in more detail in the final chapters.

Level of Autonomy

There is a higher level of disagreement in relation to the second key theme; the level of autonomy enjoyed by regimes. Although realists recognise regimes as sources of power they question their real influence within a state-centric anarchic system, in which states act rationally with their own interests as their driving force. Interest-based theorists may agree that states are rational actors but argue that there exists a higher level of co-operation between states through regimes. The cognitivists, especially those adherents of strong cognitivism, take this a step further by arguing that states comply with rules set down by regimes through a 'sense of obligation' (Hasenclever, Mayer and Rittberger, 1996). As will be argued below the autonomy of a regime, or institution, may be undermined by powerful states when their national interest is seen to be threatened, as demonstrated by the United States on numerous occasions throughout FAO's history (Staples, 2006).

Interdependence within the International System

The second key theme is closely linked to the third; the level of interdependence within the international system. Realists argue that there is little

interdependence and that the system comprises of independent rational states. Interest-based theorists believe that institutions facilitate co-operation within an increasingly interdependent world, in which there are common interests. These common interests may be brought into focus through external shocks or crises forcing co-operation in establishing and maintaining a regime or institution; itself a costly enterprise (Hasenclever, Mayer and Rittberger, 1996). For example, the desperate situation endured by millions of people following the Second World War and the Great Depression of the 1930s, including widespread hunger, with half of the world's population malnourished, (Mayne, 1947) acted as the catalyst for the world to establish, not only FAO, but the United Nations itself; a move driven by a number of interconnected crises in a world far more interdependent than at any previous time (Staples, 2006).

Importance of Information

The founders of the FAO, John Boyd Orr, Frank McDougall and Stanley Bruce, were keen advocates of internationalism, a concept that links the key themes of interdependence and the importance of information, the fourth theme to be addressed by regime theorists. During the twentieth century there emerged a body of international experts within various fields working across international boundaries to promote the well-being of the world's people, and with it developed the concept of internationalism. This proved to be a critical element in the foundation of the United Nations, and its specialised agencies. Amy Staples (2006, p.2) argues that:

> *[T]hey actively and consciously constructed for themselves and their organisations an international identity that animated their revolutionary work around the globe. That international identity grew out of their faith in progressive ideals, their own professional ideology, and their commitment to building networks of co-operation that included a broad range of organisations.*

The founders of FAO were driven by these ideals of internationalism and the belief that equipped with the best facts and figures relating to harvests, population numbers and malnutrition levels they would be able to solve the world's food production and distribution failings. They believed that information was the first step towards this aim.

All scholars of regimes place high regard on information, to monitor state behaviour, as neoliberals believe; to establish stability through co-ordination, as the realists argue; or to limit uncertainty, a stance taken by the cognitivists (Hasenclever, Meyers and Rittberger, 1996). As previously stated the weak cognitivists build their theories on three assumptions: interpretation, which shapes perceptions of reality; intersubjectively shared meanings, based on collective understanding; and increased demand for authoritative knowledge, all of which spur the necessity for epistemic communities.

By supplying knowledge to those making decisions the epistemic communities exert influence within the system, a fact that has become increasingly apparent as interest groups, NGOs and multinational corporations all vie to lobby decision-makers at global gatherings. This is especially evident in the governance of food and agriculture, which has a number of epistemic communities, from the international research institutes of CGIAR (Consultative Group International Agriculture Research) to the grassroots organisations of the peasant farmers, who have first-hand knowledge of agriculture, not to mention FAO itself. Serving different interest groups these communities may often supply contradictory information to decision-makers.

It can be argued that all three schools of thought offer elements relevant to the analysis of the FAO. The interest-based theories offer insight into the co-operation given by the organisation's member states, especially necessary for its creation and evolution; realists' interpretation of the actions of rational and self-interested states explain the actions of states aiming to protect their own agricultural sectors within the global system; and the cognitivists' stance on epistemic communities is very relevant to the various communities of experts operating in and around the agricultural sector. At the heart of these key issues are the four themes examined by regime theory: the identity of the main actors; level of autonomy of institutions; interdependence within the system and the importance granted to information.

All the main theories have some elements to recommend them for the analysis of international institutions however the knowledge-based theories of cognitivism offer the most logical framework. Taking knowledge as the starting point, rather than the power of the state, gives more scope for understanding the role of FAO as a knowledge-based and knowledge-creating organisation endeavouring to inform, set norms and standards and achieve food security through greater understanding. This may be far from the ideal envisaged by its founders, who wanted an organisation that could regulate as well as advise, nevertheless it is a role that FAO should attempt to perform well.

FAO's Epistemic Community

The founders of FAO envisaged an organisation that would enable the states of the world to co-ordinate their actions to increase food production and aid its distribution to those who needed it to ensure everyone received a well-balanced and nutritious diet. They believed that to achieve this goal FAO would need to be an activist regulatory organisation with authority; an organisation that could manage the world's resources rather than merely conduct studies to monitor the situation. However key questions were raised as to how much power FAO would possess and how much sovereignty member governments would be required to sacrifice for the greater good. (Staples, 2006) Would FAO have the power to regulate the global supply of agricultural commodities in order to support world prices? And would the organisation have the authority to distribute subsidised food to developing countries; to people who needed it? In other

words would FAO be an activist regulatory organisation, or merely an advisory body?

Before World War Two the champions of nutrition Frank McDougall, Stanley Bruce and John Boyd Orr, were conducting research into the importance of nutrition. (Their work and the history of FAO will be discussed in detail in the next chapter). They provided scientific evidence to support the emerging concept of nutrition and were acknowledged as the experts on food and nutrition within the international sphere; they formed the epistemic community at the heart of FAO's creation. They were believers in an interdependent world in which institutions would work for the good of all people, above narrow nationalistic concerns.

Peter Haas (1993) argues that networks of professionals can influence international policy to aid the creation and maintenance of international regimes and organisations, if there is uncertainty, aided by a crisis or shock; a high degree of consensual knowledge among the experts and if the epistemic community gains political power.

In the case of FAO all these conditions were met, with World War Two, following the Great Depression, acting as the biggest shock ever experienced by the international community; the members of the epistemic community were in agreement on the value of nutrition for health. These champions of nutrition

gained political power, as they actively lobbied politicians, going so far as approaching President Roosevelt himself, for an international organisation and were key figures in its creation (O'Brien, 2000). They envisaged an organisation with more political autonomy and authority than the International Institute of Agriculture, which had been set up in 1905 and later taken under the League of Nation's umbrella, to conduct surveys of agricultural production (Staples, 2006). In fact the epistemic community was fighting for the creation of an activist regulatory, rather than advisory, organisation to manage the world's resources; an organisation that would challenge the autonomy of states within the system in relation to food and agriculture.

Changes in the International System

Capitalism in the Post War Era

Despite the hopes of its founders FAO has always been limited by the international system in which it was only one small component. By the end of the war the US had half the world's wealth and commanded a position of power not seen before; only the USSR offered any balance. (Chomsky, 1999) The principal architects of the new global institutions wanted to use this power to design a system that served their interests. Diplomatic historian Gerald Haines (quoted in Chomsky, [1998] 1998, p.20) argued: "Following World War Two the United States assumed, out of self-interest, responsibility for the welfare of the world capitalist system." This can be seen in the creation of the Bretton Woods institutional architecture, most notably the IMF and World Bank, which was

designed to oversee the global financial system, arguably based largely on US ideology. This ideology posed problems for the champions of nutrition and their ideas of creating an organisation to regulate global food production and distribution. The efforts of FAO's first directors general to promote policies to ensure food security and the obstacles they faced within the system will be discussed in the next chapter.

Gerard Dumenil and Dominique Levy (2011) referred to this phase of capitalism as the 'post war compromise' that had followed the 'first financial hegemony'. This post-war capitalism was designed to promote the free flow of trade through a system of fixed exchange rates. However, it was not a system of unregulated free trade, but instead based on Keynesian policies that allowed for greater state intervention in the economy, helped to increase purchasing power, and with policies to promote full employment and the creation of some form of welfare state with health, education and retirement provision, as well as containment of financial; that is capital, interests. David Kotz (2015) argues that the state was seen as an important actor in the economy during this stage of 'regulated capitalism' as it provided an expanded supply of public goods, including social services and infrastructure, as well as pursuing other goals to correct market failures. Overall this dominant Keynesian economic orthodoxy promoted policies aimed at stabilizing the business cycle.

As part of this regulated capitalism the Bretton Woods institutions were created to fulfil Keynesian objectives. The prime responsibility of the IMF was to assist countries suffering from short-term trade imbalances; the World Bank had been established to create longer-term conditions of expansion. (Watkins, 1995) The system encouraged trade in goods with a gradual reduction of barriers. Nevertheless significant tariffs were still allowed in certain circumstances and states were still able to control capital movements in a variety of ways. This system started to break down in the late 1960s and then completely in 1973 when the US government announced unilaterally the dollar would be allowed to float, to rise and fall based on market forces, in the international currency markets. Prior to this the system had operated on fixed interest rates with the major powers' currencies tied to the US dollar, which was backed by gold. (Kotz, 2015) Chaos followed the collapse of the Bretton Woods system until a new system emerged in the 1980s.

The Rise of Neoliberalism

Capitalism has evolved through different stages throughout history culminating in its latest incarnation, neoliberalism. Initially associated with US President Ronald Reagan and UK Prime Minister Margaret Thatcher, neoliberalism has become the dominant global political economic trend adopted by political parties of the centre, as well as those of the left and right (Chomsky, 1999). Since the 1970s when there was an emphatic turn towards neoliberalism almost all states have embraced some form of neoliberal theory, some voluntarily and some by

coercion through structural adjustment (Harvey, 2005). As this new system was implemented through the 1980s and 1990s free movement of goods, services, capital and money were emphasised, the IMF, World Bank and WTO became the system's enforcers and Keynesianism was renounced. (Kotz, 2015)

Also known as the Washington Consensus, due to its close association with US economic ideology, neoliberalism comprises an array of market orientated principles, often implemented in developing countries through SAPs, as discussed in chapter one. There are three basic tenets of neoliberalism: the liberalisation of trade and finance to allow the markets to set the price, the promotion of macroeconomic stability by ending inflation and the implementation of wide-spread privatisation (Chomsky, 1999). As an economic theory it is simply liberalisation, stabilisation and privatisation; through its implementation, however, it has also become a political and social system.

Neoliberalism values individualism, with the market seen as the mechanism through which individual choice can drive the economy. "The state, by contrast, is seen as an enemy of individual liberty, a threat to private property and a parasite living off the hard work of individuals" (Kotz, 2015, p.11). The system has been designed to benefit the wealthy. This is not surprising; McChesney argues that the principle architects of the neoliberal Washington Consensus are the masters of the private economy and as such want governments to stay out of important decision-making processes. Governments are portrayed as

“incompetent, bureaucratic and parasitic” and hinder the “free policies that encourage private enterprise and consumer choice, reward personal responsibility and entrepreneurial initiative.” To ensure this message is accepted “a generation of corporate-financed public relations efforts has given these terms and ideas a near sacred aura” (1998, p.7).

This link between individual economic freedom and democracy was made by Nobel Prize winning economist Milton Friedman (2002 [1962], p.9) when he argued that the “historical evidence speaks with a single voice on the relation between political freedom and a free market.” In his 1962 book *Capitalism and Freedom* in which he puts forward the case for capitalism he advocated the end of the Bretton Woods system and the introduction of a floating exchange rate; two developments that would follow within a decade.

Chomsky (1998, p.7) argues neoliberalism refers to “the policies and processes whereby a handful of private interests are permitted to control as much as possible of social life in order to maximise their personal profit.” It has been adopted by political parties, from across the centre ground, which represent the immediate interests of extremely wealthy investors and has been instrumental in changing four main types of institutions: the global economy, the role of government in the economy, the relationship between capital and labour and the corporate sector. (Chomsky, 1998; Kotz, 2015) Harvey (2005, p.3) argues that the implementation of neoliberal policies has “entailed much ‘creative

destruction', not only of institutional frameworks and powers (even challenging traditional forms of state sovereignty) but also the division of labour, social relations, welfare provisions, technological mixes, ways of life and thought, reproductive activities, attachments to land and habits of the heart."

Neoliberalism has been described as "capitalism with the gloves off" in which "business forces are stronger and more aggressive and face less organised opposition than ever before." (McChesney, 1998, p.9) As it has evolved since its initial introduction in the early 1980s neoliberalism has been associated with two related developments; globalisation and financialisation. Gerald A. Epstein (2005, p.3) describes financialisation as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies." Dumenil and Levy argue (2011, p.8) that the increased financialisation has enabled large income flows "from the growing indebtedness of households and government" and that "extreme degrees of sophistication and expansion of financial mechanisms were reached after 2000, allowing for tremendous incomes in the financial sector and in rich households." This created even greater inequality. The removal of safety nets has only made the situation worse for the poor.

According to Richard Higgot and Eva Erman (2010) this integration of the global economy through liberalisation of the trade regime, deregulation of the financial markets and the privatisation of state assets led to globalisation. Higgot and

Erman (2010, p449) argue that along with this deregulation there has to be the "development of norms, institutions and processes to manage globalisation" otherwise "many of the advantages it has brought the world could be undone by a failure to mitigate the excesses and negative consequences that emanate from it, especially for large sections of the world's poor."

Joseph Stiglitz (2002) highlights the benefits of globalisation but concedes that many of these benefits have been enjoyed by just a few. Written before the global financial crisis of 2008 he bases his analysis on the economies of East Asia following the 1997-1998 economic crisis in the region. He argues that globalisation has worked most effectively when government takes an active role in managing the economy. Taking South Korea and Taiwan as examples of the most successful globalising countries Stiglitz argues (2002, p.1) that this was possible because each country "determined its own pace of change; each made sure as it grew that the benefits were shared equitably; each rejected the basic tenets of the Washington Consensus, which argued for a minimalist role of government and rapid privatisation and liberalisation." These countries had been successful by making globalisation work for them and it was only "when they succumbed to the pressures from the outside that they ran into problems that were beyond their own capacity to manage well." (Stiglitz, 2002, p.2)

Bayliss et al (2011, p.6) argue that the World Bank "was instrumental in promoting the neoliberal perspectives on development that came to dominate

the agenda of many international development actors during the 1980s." However, by the late 1990s the World Bank, at least in principal, was moving towards a more comprehensive approach to development. (World Bank, 2001) Despite this broadening of the definitions of poverty to include, among others, low achievement in education, health and nutrition, as well as powerlessness and vulnerability Bayliss et al (2011) argue that this was not a fundamental departure from neoliberalism but instead the start of the second phase. The first phase, Washington Consensus, had seen the extension of the markets and maximum privatisation, and the Post Washington Consensus (PWC) second phase, saw the state used to correct market imperfections, through initiatives such as public-private partnerships. As part of this shift the World Bank looked for complementarities between its private and public sector arms by mobilising private finance for development projects. The authors (2011, p.8) argue that neoliberalism "has always been a contradictory and shifting amalgam of ideology, scholarship and policy in practice. In particular, neoliberalism has never been short of state intervention. Indeed, it has positively deployed it to promote not so much the amorphous market as the interests of private capital." The World Bank's moves to support institution and capacity building activities to aid the expansion of the private sector into non-traditional areas of development including health and education highlight this objective. (Bayliss et al, 2011)

The World Bank's rhetoric on pro-poor policies is clearly stated in its report on agriculture for development (2008), which calls for support for smallholder

farmers to help increase productivity, stimulate growth, overcome poverty and increase food security. It recognises the vital role agriculture must play in the achievement of the MDGs and focuses on ways to generate rural jobs by diversifying into labour-intensive, high value agriculture linked to a dynamic rural non-farm sector. However, Henry Veltmeyer (2009) argues that the report does nothing to move the World Bank's position forward; instead it remains securely rooted in neoliberalism and is still anti-smallholder farming and anti-peasant. He states (2009, p.394) that it does nothing to "critically examine the development dynamics of the post-Washington Consensus on the need for a more inclusive form of neoliberalism and a more participatory and equitable form of development." He also challenges its assumption that "the most practical and advisable solution to the problem of rural poverty is for many of the 'economically inefficient' rural poor to abandon farming and exit the countryside." (Veltmeyer, 2009, p.394)

Neoliberalism, in both its phases, has become the dominant economic and political belief system of the last three decades. The impact of neoliberal policies has been clear to see in the agricultural sector, as described in chapter one, from significantly increasing food insecurity to placing additional strain on the environment. (Rogers, 2008b; Clapp, 2006; Weis, 2007; De Schutter, 2014)

The financialisation, deregulation and privatisation have promoted a series of economic expansions, but have also created the conditions for the system's

eventual collapse. Kotz (2015, p.5) argues that the crisis that started in 2008 was not just a financial crisis but instead “a structural crisis of the neoliberal form of capitalism.” As the crisis was unfolding Kotz (2008) argued that neoliberal capitalism would have to be replaced by some other form of capitalism as state bailouts and imposition of new regulations would not be enough to allow the system to return to a business-as-usual model. It may have promoted high profits and economic expansion for a time but he predicted (2008, p.2) that “eventually the contradictions of that form of capitalism undermine its continuing operation, leading to systemic crisis.” An examination of the effects of the 2008 global crisis is beyond the remit of this thesis.

Conclusion

The main theories of international relations, realism, neo-realism, liberalism, neoliberalism, constructivism and cognitivism are all concerned with the identity of the actors within the international system, the ways in which they interact with each other, and the role that information plays in these relationships. As a knowledge-based organisation FAO has a vital role as a provider of information, through its own epistemic community and its ability to bring together other actors. This will be examined in greater detail in later chapters.

FAO does not operate in a vacuum and therefore an understanding of the system within which the organisation is situated is essential. FAO was established at the end of World War Two as part of an international system

balanced between regulated capitalism and communism; as the communist states only partially engaged with the UN agencies the greatest influence on these agencies was the US and regulated capitalism. This was replaced after the economic crisis in the 1970s with a system of unregulated capitalism, neoliberalism. Both exerted their influence on FAO as well as the wider international system in many different ways.

In the next two chapters the history of FAO from its post-war creation to the World Food Conference in 1974, and then from 1974 until 2007, the date of FAO's reform, will be examined in detail.

Chapter Four:
FAO from Idealism to Reality (1945 – 1974)

Introduction

This chapter will examine the emerging concept of nutrition during the pre-war years, as championed by the League of Nations' Mixed Committee and individuals working within the field, such as Frank McDougall, Stanley Bruce and John Boyd Orr. This work led directly to the Hot Springs Conference and its recommendation to create a permanent organisation, the United Nations Food and Agriculture Organisation (FAO), through the work of an Interim Commission. The sequence of developments will be followed from the *Final Act of the United Nations Conference on Food and Agriculture,*[13] the outcome of the Hot Springs Conference (1943); the work of the Interim Commission (from July 1943 to October 1945), and the final constitution as accepted at the Quebec Conference on 16 October 1945, which formally established FAO. An examination of the founding principles of FAO, as first proposed at Hot Springs and then enacted in the constitution will be made, followed by a review of FAO's organisational structure and early history up until 1974 and the World Food Conference, held in Rome. Highlighted will be Boyd Orr's World Food Board proposal, Dodd's vision for an International Commodities Clearing House and Sen's ambitious Freedom From Hunger Campaign.

[13] The term United Nations referred to the Allied Nations that participated in this conference, not the United Nations organisation, which was not established until October 24, 1945 (UN, 2012).

As different actors arrived at the negotiating table with their own agendas, a number of themes and issues emerged: the strong desire for a better post-war world; the evolving concept of nutrition and the scope of its applicability; visions of a shift in production and distribution methods that required massive population upheaval and adjustment; belief in science to deliver results; and the reconstruction and restructuring of the economic landscape. However, despite the common desire to create a better world, there had always been a struggle at the heart of FAO, between those who worked towards the creation of a proactive organisation with authority to regulate production and distribution of food and those who wished to curb its influence and instead establish an organisation to act as an advisory body with limited jurisdiction over sovereign states. These issues were debated even as the Allied armies fought for victory.

Delegates at the Hot Springs Conference envisaged a better post-war world; one in which all peoples would be free from the horrors of want and fear – an ideal captured by President Roosevelt in his State of the Union Address in 1941, in which he called for freedom from want and fear[14] (Roosevelt, 1941). This was the first of a number of conferences[15] to bring together delegates from the Allied

[14] Roosevelt's drive for freedom from fear and want was later enshrined in the Atlantic Charter, signed in August 1941 by Roosevelt and Churchill (NATO, 1941)

[15] For example there were several meetings and conferences, most notably the Quebec Conference in August 1943 and the San Francisco Conference in 1945 at which the concept and then the charter of the United Nations were established (US Department of State). Between July 1 and 22, 1944 the United Nations Monetary and Financial Conference at Bretton Woods agreed the new rules for the international monetary system and established the International

Nations as they started to plan for the world after hostilities and it was no accident that the theme of the first was food. Food was widely seen as a non-political and unifying issue, since food - or more accurately the lack of it - had long been the focus of much international attention. During the 1930s, as the Great Depression illustrated the unconscionable condition, hunger in the midst plenty, the work of the Mixed Committee of the League of Nations had drawn attention to the plight of millions around the world. In the United States and Western Europe it was estimated that between 20 percent and 30 percent of the population were malnourished; and although shocking in their own right, these figures pale in comparison to those of Asia, in which an estimated 75 percent of the 1150 million inhabitants consumed diets far below the standard necessary for health (Boudreau, 1943). The Second World War made a dire situation even worse.

The Champions of Nutrition

Even before war broke out millions lacked the basic level of food required for health. In the 1930s around one third of the population in the United States were poorly fed. (Hambidge, 1955) Pre war poor nutritional standards were highlighted by the League, as part of what John Black (1943) termed the International Food Movement. Although the need for adequate quantities of food was widely recognised the importance of the “recent discoveries of the newer

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Monetary Fund and the International Bank for Reconstruction and Development. (US Department of State)

knowledge of nutrition" (Black, 1943, p792) were only understood within a narrow scientific context[16].

Therefore despite work being carried out on nutrition as a factor for human health, by the Health Organisation of the League and the International Labour Organisation, it was only when, Stanley Bruce, the High Commissioner and former Australian Prime Minister, expounded its virtues that it gained wider political acknowledgement. In a 1935 speech to the League, Bruce advocated the "marrying health and agriculture" (O'Brien, 2000). In addition he proposed the setting up of a Mixed Committee on Nutrition, to which national nutrition committees would report their findings of studies into issues and policies relating to food and nutrition in the national context, including the compilation of dietary surveys. The model, which would be adopted by FAO, proved successful, with the establishment of national nutrition committees in 23 countries and 26 British dependencies before the interruption of war (Boudreau, 1943).

Throughout the 1930s there had been an emerging consensus on the need not just for enough food but for nutritious food; this link between nutrition and health had been a huge leap forward in understanding. In addition, the connection between poverty and malnutrition (Boyd Orr, 1936) had also been made, as

[16] The discovery of vitamins had only been made twenty years previously by Casimir Funk, who through his research into beri beri, scurvy, pellagra and rickets came to the conclusion, in 1912, that these conditions were caused by a deficiency in a special substance, which he called vitamine but later the 'e' was dropped.
(Jones, 1992) Elmer Vernon McCollum through his work into rickets discovered Vitamin A and B between 1912 and 1915 and Vitamin D in the early 1920s (Holt, 1968)

adequate amounts of food remained out of reach of those in need because they lacked the purchasing power to buy it while at the same time farmers faced bankruptcy with no market for their surplus produce. Boudreau (1943) argued that this waste and injustice was viewed as a threat to civilisation itself.

During the inter-war years Frank McDougall shifted his thinking from one based on Empire Trade, described by O'Brien (2000, p165) as "narrowly focussed, restrictive, combative and essentially pandered to xenophobic nationalistic instincts and pursuits that could best be realised within the limits of a confined section of the world and to hell with the rest" to the ideologically opposed position of support for nutrition, which he argued was "world embracing, hostile to institutional barriers, national or otherwise, favoured movements of people and produce and ultimately championed a redistribution of wealth that would provide a well balanced nutritional diet for the greatest possible number." In his 1935 memorandum entitled 'The Agricultural and the Health Problems' McDougall would "argue a bankruptcy of statesmanship if it should prove impossible to bring together a great unsatisfied need for highly nutritious food and the immense potential production of modern agriculture." (McDougall; F.L. 1972) In a move away from empire trade, McDougall proposed a lowering of tariff barriers as one component in the fight against malnutrition and argued for nutritional standards to be raised.

McDougall was not the only voice calling for a different approach to production and trade that was not centred on tariff barriers, focusing instead on the needs of consumers rather than just those of producers. John Boyd Orr (1943) had also called for the increased production of protective foods[17], offering better nutritional value than cereals. And H. R. Tolley, head of the Agricultural Adjustment Administration in the United States, attempted to shift agricultural production from cereals and cotton to protective foods, but with little success (Black, 1943).

Another influential figure, who worked closely with McDougall on promoting the issue of nutrition, was the High Commissioner and former Australian Prime Minister, Stanley Bruce. He expounded its virtues in his phrase “marrying health and agriculture” in his speech to the League in 1935 (O’Brien, 2000). He called for a world food plan based on human needs co-ordinated through the League, which would, he argued, bring prosperity to agriculture and to the wider economy (Shaw, 2007). In the following year Boyd Orr, along with his colleagues at the Rowlett Institute, published *Food, Health and Income* which provided evidence that at least one third of the UK population was malnourished (Boyd Orr, 1936). However during the war Britain was forced to introduce a system of food rationing. Boyd Orr’s research was used to plan the

[17] The idea of protective foods was introduced in World War Two, building on the work of Boyd Orr and other nutrition experts. By the 1930s the importance of a well-balanced diet of dairy foods, fruit and vegetables, whole grains and pulses had been recognised and the rations system was based upon this understanding. In Britain mortality rates from malnutrition fell. (Jones, 1992)

management of food based on the nutritional needs of the whole population and of particular groups, including children, nursing mothers and workers in war industries. Rationing "was so effective that in spite of food shortages, bombing, difficulties of transport and the monotony of the wartime diet, the poorer people were fed better than they had ever been." (Hambidge, 1955, p.48) Rationing, although unpopular, had proved a success and given Boyd Orr further evidence to support his argument for improved nutritional standards.

McDougall, Boyd Orr and Bruce, known as 'the men from Geneva' because of their work at the Geneva-based League of Nations, continued to work together. McDougall (1943) summarized their conclusions[18] and highlighted the importance of the quality and quantity of food for national health improvements, the benefits of science as a tool to produce sufficient food, the positive effect that adopting sound nutritional standards around the world would have on agriculture and world trade, as well as the belief that to achieve these ends required international coordination of national action and international assistance to many countries (Black, 1943).

These aims had developed through years of work studying malnutrition and the international system of food and agriculture during the depression. The advocates of these aims believed that the advances in technology and science

[18] McDougall, F.L. (1943) International Aspects of Postwar Food and Agriculture in The Annals of the American Academy of Political and Social Science 1943 225 pp. 122-127

would enable the world to produce enough food, of sufficient quality, to feed a growing population; and changes in the economic system would allow people to purchase these agricultural products.

To achieve these aims they believed in an interdependent world in which institutions would work for the good of all people, above narrow nationalistic concerns. They actively lobbied for an institution to govern the production and distribution of food, going so far as approaching President Roosevelt (O'Brien, 2000) to argue their case. They were fighting for the creation of an activist and regulatory, rather than advisory, organisation to manage the world's resources; an organisation that would challenge the autonomy of states within the international system in relation to food and agriculture.

The champions of nutrition, in calling for the creation of an international organisation, were an active epistemic community, with a shared understanding of the importance of good nutrition. Congnitivists such as Haas (1993) argue that shared meanings, based on an understanding of the natural and social world, need to be established before consensus can be reached on the best course of action. The epistemic community were in agreement on the type of organisation they wanted for the world, however, although the other actors, namely states, agreed on the need for an international organisation to operate in the realm of food and agriculture, the ultimate purpose of this organisation was contested. Agreement was not gained on the level of authority the organisation

should possess, as states sought to protect their own sovereignty. Doyle (1983) argues that state sovereignty is a basic tenet of liberal international theory and throughout the history and development of FAO there is a reoccurrence of the conflict between states protecting their sovereignty and the epistemic community striving for a strong international organisation to operate in an interconnected world.

Hot Springs Conference, 1943

The United Nations Conference on Food and Agriculture, known as the Hot Springs Conference, was a momentous event; taking place even before the end of hostilities it demonstrated the desire to build consensus and develop a framework for co-ordinated action to build a better world for the post-war population. Held in Virginia, in the United States, between 18 May and 3 June 1943, it brought together representatives from 44 countries, and an observer from Denmark, between them representing about 75 percent of the world's total population (Evang, 1943). Despite the fact only representatives from Allied Nations were present, delegates at the conference recognised the need to bring in other nations, even former enemies, once the war was over: the need to create a better post-war world was conceived from the start as an all-inclusive one. Frank Boudreau (1943, p324) captured the mood of the conference when he said:

> *The delegates appreciated that they were meeting in wartime; that the war would not be won with the collapse of the Axis powers but must be won also in the economic, social and political fields.*

Something of the urgency of war crept into their deliberations; they demanded immediate action and they left nothing to chance.

At the conference experts within the field of food, agriculture and nutrition, joined government representatives to discuss the creation of an organisation for food and agriculture; bringing together state and non-state actors. Boyd Orr did not appear at the conference, since the British government had been angered by his study highlighting malnutrition in pre-war Britain, (Boyd Orr, 1966). However, he made a presentation via film, and received a standing ovation when he called on those present to join the war on want, taking his lead from President Roosevelt.

In the opening declaration issued at Hot Springs, delegates outlined their hopes for the future and their proposed steps to achieve them, and in the process started the discussion on FAO's founding principles. Through seven succinct points the conference outlined the steps to achieve freedom from want, initially by winning the war and then feeding people in its aftermath, before attention could be paid to maintaining freedom from fear and freedom from want in the longer term. The two concepts, the two freedoms, were explicitly linked as the conference acknowledged that one could not be achieved without the other.

The connection between food, health and science was made as the conference admitted that there had never been enough food for the health of all people: a situation argued to be unjustifiable as the world possessed the knowledge to

produce enough food for everyone. This argument promoted the view of the nutritionists McDougall and Boyd Orr, who, pre-war had called for an expansion of production rather than restriction. However, apart from the wording in the initial statement: “food, suitable and adequate for the health and strengths of all people,” (United Nations Conference on Food and Agriculture, 1943, p.13), the declaration does not mention the need for nutritious food: the emphasis is on the quantity rather than the quality of food provision. Despite this omission from the declaration, nutrition is a key component in the remainder of the document, which calls for the improvement of national diets and links malnutrition, deficiency and disease.

The declaration made the bold statement: “the first cause of hunger and malnutrition is poverty” (ibid) acknowledging the stance taken by Boyd Orr and McDougall, who had long argued that people needed purchasing power to avoid a recurrence of hunger in the midst of plenty. The declaration called for an expansion of the whole world economy and with it envisaged an idealistic future:

> *With full employment in all countries, enlarged industrial production, the absence of exploitation, an increasing flow of trade within and between countries, an orderly management of domestic and international investment and currencies, and sustained internal and international economic equilibrium, the food which is produced can be made available to all people. (United Nations Conference on Food and Agriculture, 1943, p.13)*

Unfortunately this state of balance has not yet been achieved even in the twenty-first century, and the answer as to why this has not occurred may have its roots in the fact that the declaration shies away from confronting the anarchic nature of the international order. Instead it states: “The primary responsibility lies with each nation for seeing that its own people have the food needed for life and health; steps to this end are for national determination. But each nation can fully achieve its goal only if all work together” (ibid). There was a small token towards co-operative working at the end of this statement but primarily state sovereignty was acknowledged and unchallenged leaving little room for manoeuvre for the proposed permanent organisation, which would become the Food and Agriculture Organisation eighteen months later.

To achieve freedom from want the conference called for “concerted action among all like-minded nations to expand and improve production, to increase employment, to raise levels of consumption and to establish greater freedom in international commerce.” (United Nations Conference on Food and Agriculture, 1943, p.14) It recommended that nations should collaborate and report to one another their progress; and create a permanent organisation to assist them in these aims. An Interim Commission was to be established within six weeks of the Conference to carry out the recommendations.

A number of themes run through *The Final Act of the United Nations Conference on Food and Agriculture.* The long shadow of the war was clearly

visible throughout the document in the urgency of the language, as the document called for immediate action. In addition, the concept of nutrition and its connection with health, a relatively new understanding, had been accepted as the norm as seen throughout, but most prominently in the first section of the report, which advocated actions to improve national diets, take positive measures to improve the diets of vulnerable people and investigate the links between malnutrition and disease in each nation. And the understanding that science had the capability of assisting the human race in its quest for sufficient food had also gained traction.

However radical these ideas may have seemed at the time, the document's most potentially ground-breaking recommendations could be found in the sections concerning its vision for the long-term production of food, and the financing of such a system. Change in production, with increased mechanisation, would require a shift in populations from rural to urban and from agricultural production to industry and even from one country to another. The document envisaged occupational adjustments in rural populations and recommended a restructuring of population employment opportunities, through education, so that people could achieve sufficient purchasing power to meet their food requirements. The document viewed production in a global context and proposed organising it on such a basis, with implications for state sovereignty.

To achieve “an economy of abundance” the conference also advocated a reduction of trade barriers, and a removal of all types of obstacles, both regulatory and physical, to the production and distribution of food. Extreme fluctuations in the price of food were seen as damaging to producers and consumers alike and calls were made to establish international commodity arrangements with which to control them. Although the conference envisaged widespread decrease in the number of small farmers due to increased mechanisation of production it did advocate the availability of affordable credit for the remaining small farmers. Despite the optimistic view of the benefits of a restructuring of the systems of production and international trade there was an acknowledgement that, especially in the short term, there would be some sections of the population unable to purchase food (ibid). It called on governments to ensure measures were in place to feed their people through the use of reserves.

As the conference was the first to be held to discuss the post-war world some of its recommendations were speculative in nature. For example, recommendations were made for the permanent organisation to work with other organisations, which did not at the time exist. In addition the conference did not specify the origins of the agricultural credit to be used for small farmers, or the source of authority for the commodity arrangements; issues that the Interim Commission was forced to confront and with the impact of its decisions still felt today.

Throughout the report, recommendations were made for the permanent organisation to gather information, either through the nation states or through its own initiative, on all aspects of food and nutrition. This was a practical necessity, as not enough was known of the state of the world's food and agriculture provision at that time, which was FAO's primary function; however, the gathering and dissemination of information, also had a formative effect on the shaping of FAO as an advisory body, much to the disappointment of its champions (Boyd Orr, 1966).

Despite the efforts of people working within the governance of food and agriculture since the Hot Springs Conference there are still issues that were raised then that are still relevant in the twenty-first century. The most obvious is that despite improved efficiency in production and distribution of food approximately 15 percent of the world's population is without access to an adequate diet[19]. The conference also highlighted the vulnerability of the world's soil and water sources and advocated the diversification of production and balanced mixed rotational farming methods; recommendations still being made, and in many cases ignored, today.

[19] This figure is based on food production and consumption data referring to 2008, at the height of the food price crisis of 2007-08 and the financial crisis. (United Nations Development Programme, (2012) Millennium Development Report)
When Jose Graziano da Silva became the Director General of FAO on January 1, 2012 he stated that there were an estimated 925 million people who suffer from chronic hunger in the world, approximately one in seven (FAO, 2012b)

There have been hundreds of reports produced and information disseminated but there are still problems, illustrating the fact that information alone is insufficient for the practical business of fulfilling FAO's remit. Issues of agricultural commodity arrangements, agricultural credit and land tenure are still very prominent as is the level of poverty in both urban and rural settings. However these are just some of the issues in the twenty-first century at the global level, at which there now operates a very complex network of organisations, rules and regulations that create inequitable trade agreements and sustain a system of high agricultural tariffs and subsidies; and at the same time allow transnational corporations to wield immense political and economic power (Murphy et al, 2012).

Four months later, a meeting of the Nutrition Society, convened in Edinburgh to discuss the Hot Springs recommendations. Karl Evang argued that the conference's recognition that it was the duty of governments to take responsibility for the welfare of their own people and to report their progress regularly to one another had proved to be an important turning point as it "created a sort of world conscience in regard to the food supply of the world." (Evang, 1943, p.165) However, from a twenty-first century perspective, after numerous conferences, at which leaders and experts have declared their horror at the scale of global malnutrition, their unstinting support for actions to remedy the situation and calls for more reports to assess the problem, it may seem obvious that Evang was being too optimistic. Nevertheless hindsight should not

diminish the progress made at Hot Springs at a time when the concept of a United Nations was still at the theoretical stage.

Although the desperate need to feed the world's people was reason in itself to succeed, Boyd Orr saw the creation of FAO in a wider context: its place in halting the cycle of unfulfilled promises leading to world war, as played out in the first half of the twentieth century, and the first step towards the realisation of a world government (Boyd Orr, 1949).

The Interim Commission

The Interim Commission created to draft a constitution for FAO and constructed its organisational framework. It began its work on July 15, 1943, just six weeks after the Hot Springs Conference, and ceased to exist once its remit had been fulfilled, at the creation of FAO on October 16, 1945. It had 61 representatives from 15 countries working on five technical committees, advised by two panels of experts, on economic and scientific matters. L. B. Pearson was its chairman.

As part of its work the Interim Commission published its first report to member governments in August 1944 in which it expanded on the recommendations outlined at the Hot Springs Conference and laid out its proposals for the new organisation. In the report, the inevitability of starvation was not only challenged but the potential for a better world was proposed, one in which "the way is open to move toward new levels of well-being which men have hitherto thought unattainable" (Interim Commission, 1944, p.9).

The Commission acknowledged the predictions for a better world, based on discoveries and developments, already introduced at the Conference, such as the advances in scientific knowledge to increase production and combat diseases and pests, as well as those for agricultural mechanisation and the handling, processing, storing and transportation, which would combine to ensure increased production and better distribution of food. Also, advancements in an understanding of nutrition, malnutrition and disease would enable producers to grow the foods needed for human health, arguably what would now be termed a Global Public Good.

The Commission (1944, p10) argued: “We know what foods the human body needs not only to prevent these diseases but to build resistance to many others, lengthen the span of life, favour the birth of healthy children and raise the power of many individuals to do physical and mental work formerly thought to be beyond their innate capacity.” Similar to the Conference, the Commission was optimistic in its outlook, envisaging a world of cooperation to benefit all; however, there was recognition that there might be some resistance to the changes proposed, especially the adjustment from traditional practices to those under discussion.

In addition to building on the Conference’s recommendations, the Commission also expanded certain areas, such as bringing fisheries and forests (barely

mentioned at the Conference) under the remit of FAO. Its approach to financial considerations was also extended. Agricultural credit affordable for smallholder farmers had been declared a necessity by the Conference, but despite vague recommendations calling for credit with low interest rates, the details for implementation were omitted, leaving the planning to the Commission. The Commission recognised the essential role of agricultural credit and declared that the basic purposes of FAO would not be achieved without it: not only would agricultural production be limited but so would the expanding world economy. Nevertheless, the Commission did not assign agricultural credit, or for that matter food, special status. It argued that credit, for agriculture or any other purpose, should be administered by a single international authority, and not by FAO (Interim Commission, 1944). FAO would have some authority in matters relating to agricultural credit but not ultimate control. This was a huge disappointment for those championing nutrition, including Boyd Orr, who fought for the creation of a World Food Board 1966), during his short time as FAO director general.

For those wanting an independent activist organisation to stimulate food production and stabilise prices there were similar unsatisfactory results when the Commission considered commodity arrangements[20]. It recognised their vital

[20] Agricultural commodity arrangements could potentially have a wide ranging impact on all aspects of food production and distribution and the Interim Commission recognised the role "that they could play in a) coordinating internationally diverse or conflicting national price and marketing policies and programmes; b) eliminating excessive fluctuations in prices; c) mitigating some of the effects of trade cycles; d) maintaining adequate supplies for consumers; and e)

role but recommended that “international commodity arrangements for both agricultural and non-agricultural products be coordinated under the supervision and direction of a single international authority.” (Interim Commission, 1944, p.24) It was recommended that FAO should be involved but its authority was diluted with phrases such as “where appropriate” and “should be entitled to propose” (ibid).

Founding Principles, Aims and Roles

In the preamble of the constitution (Interim Commission, 1944, p.41) the founding principles of the proposed permanent organisation were laid out:

> *The Nations accepting this Constitution, being determined to promote the common welfare by furthering separate and collective action on their part for the purposes of*
>
> - *raising levels of nutrition and standards of living of the peoples under their jurisdictions,*
> - *securing improvements in the efficiency of the production and distribution of all food and agricultural products,*
> - *bettering the condition of rural populations,*
> - *and thus contributing toward an expanding world economy,*
>
> *hereby establish the Food and Agriculture Organisation of the United Nations.*

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ensuring markets for producers while promoting desirable adjustments in agricultural production” (Interim Commission, 1944, p.24)

The Commission did not adequately address the tension between the two opposing standpoints: FAO as advisory body, as promoted by Britain and the US; or FAO as active regulatory body, as championed by Boyd Orr, McDougall and their fellow nutritionists. Staples (2006, p.78) argues that FAO's constitution was watered down by the Commission from the ideals expressed in the Hot Springs Declaration and "instead of calling for freedom from hunger, it merely called on all signatories to better standards of living and nutrition in areas under their jurisdiction, improve systems of production and distribution of food, elevate rural standards of living and contribute to an expanding world economy."

The core functions were set out in article 1, which stated: "the organisation shall collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture" and "shall promote and, where appropriate, shall recommend national and international action" in relation to six principle areas[21] (Interim Commission, 1944, p.41). Although both agricultural credit and agricultural commodity arrangements were specifically mentioned FAO was only asked to adopt and not draw up policies related to them.

[21] a) scientific, technological, social and economic research relating to nutrition, food and agriculture; b) the improvement of education and administration relating to nutrition, food and agriculture, and the spread of public knowledge of nutritional and agricultural science and practice; c) the conservation of natural resources and the adoption of improved methods of agricultural production; d) the improvement of the processing, marketing and distribution of food and agricultural products; e) the adoption of policies for the provision of adequate agricultural credit, national and international; f) the adoption of international policies with respect to agricultural commodity arrangements (Interim Commission, 1944, p.41)

For those wanting to establish a regulatory organisation, with authority and funding to implement structural change, the Commission had proved incapable of delivering a strong FAO. Instead, it was to be an advisory organisation promoting research in the areas of natural sciences, technology, economic organisation of agriculture, social factors, and public measures of regulation and assistance, and establishing a reputation for its excellence in such work. It was also to coordinate the gathering of information from member countries and the dissemination of research through education and publications.

The conflict between a number of FAO's powerful member states and the epistemic community was clearly evident as the Commission struggled to combine the different objectives of each set of actors, of nutrition versus trade, demonstrating the fault lines between state sovereignty, institution autonomy and interdependence within the international system, even at this early stage of its creation. By relegating freedom from hunger to the periphery and placing the emphasis on states' responsibilities to their own populations the Commission had in a single stroke undermined the authority of the epistemic community, and the nutritional standard they advocated; enshrined the autonomy of states as main actors, with ultimate authority over the nascent FAO; and limited the scope of a truly interdependent post-war world, as envisaged by those at Hot Springs.

Although the remit of FAO was more limited than some would have hoped it still had a daunting task ahead, one in which it had to steer a course between taking

“vigorous action in the critical period just after the war when conditions [were] fluid and before vested interests [had] become established,” following “a policy of careful development, involving the painstaking study of its complicated problems.” (Interim Commission, 1944, p.31) Notwithstanding the initial hope for FAO to carve out its own niche this would prove challenging as the powerful member states had already staked out their own interests.

Although cognitivists place significant emphasis on the role of the epistemic community and its role in the provision of information, this role is arguably only one element that is required. Even if the epistemic community is in agreement, as was demonstrated by the champions of nutrition, its ability to persuade states to create an authoritative organisation was limited as states sought to protect their own national interests.

Traditional realist theorist Kindleberger ([1973], 1986) argues that there is no substitute for a strong hegemon within the system. In the post-war world the hegemon was clearly the US. However, Krasner’s (1993) interpretation of the role played by regimes may be more appropriate as he argues that regimes are distributors of power and interests, through which the players and game rules are decided by those in power. Powerful states, most notably the US and to a lesser extent Britain, ensured FAO did not possess too much authority by limiting its remit at its moment of creation.

Organisational Structure

All those countries represented at the Hot Springs Conference were entitled to join the new permanent organisation. Countries not represented at the Conference, including former enemies, were also invited to join. All potential new members needed a two-thirds majority for acceptance. The organisation was, and remains, designed to be inclusive and egalitarian with each member state permitted one representative and one vote at FAO's Conference, which meets at least once a year and is the policy-making body. The Interim Commission also proposed the establishment of an Executive Committee, of nine to fifteen members, ideally experts with a variety of experience in relation to food and agriculture, designed to act for the conference between sessions. This was established but later disbanded, as detailed below.

FAO head, the director-general, has full power and authority to direct the work of the organisation but needs the support of the conference and, until disbanded, the executive committee. He, and so far there have only been male director-generals, does not have the right to vote.

Although FAO operates in a state-centric anarchic system the organisation itself is international with staff recruited on their ability, rather than nationality, and their allegiance exclusively reserved for FAO. No members of staff are allowed to receive instructions from any authority external to FAO. Member states are reminded to respect the international character of the responsibilities of the staff

and not to attempt to influence them in any way. The director-general, with the approval of the conference, can establish regional and liaison offices. And FAO is tasked with cooperating with other organisations.

Financial Control

There were two groups at Hot Springs[22], one which favoured a strong organisation with the authority to promote increased world food production with stabilised prices and a budget of US $10 million, a modest budget, argued Boyd Orr (1966), in relation to that of the Agricultural Department of the United States, with a budget of US $1,000 million, and the opposing group that wanted to curb the authority of the new organisation and limit its budget to US $1.5 million. In the end it was agreed that FAO would have an operating budget of US $5 million a year.

Member states' contributions, which were determined on an assessed rather than a voluntary basis, were calculated on a sliding scale but no one country was expected to contribute more than 25 percent of the organisation's total expenses (Mayne, 1947). Yet according to FAO archives, in its first year the US contributed 8.3 million dollars and by 1955 it provided 30 percent of the organisation's costs (O'Brien, 2000). It has to be recognised that the relationship between the US and FAO, and the UN itself, has always been complex as each

[22] Boyd Orr, MacDougall, members of the US delegation from the Department of Agriculture, Latin American delegates and several members of the British Food Mission in Washington supported the idea of an activist organisation but arguing against the idea were the British delegation, fearful of a rise in food prices, and US delegates from the State and Commerce Departments, aiming instead for an internationally managed system of free trade (Staples, 2006)

actor has endeavoured to exert control over policy-formation and finances. In this battle for control the US can clearly be seen as the hegemon within the international system, especially considering the position of the USSR, as even though present at the Hot Springs Conference in 1943, and therefore eligible for original membership, the USSR did not take up this opportunity. It was not until 2006 that the USSR's successor, the Russian Federation, accepted FAO constitution and joined as a full member, from its position as an observer (FAO, 2006). And so it can be argued that whatever criticisms are levelled at the US regarding its relationship with FAO, its willingness to enter the game, however it chose to play it, has to be taken into account.

Despite the support given to the young organisation FAO faced daunting problems in the post-war world in which half the global population was estimated to be malnourished, worldwide agricultural production was down 10% and the global population was increasing by 22 million a year (Boyd Orr, 1966). And this was in addition to the three decades of falling agricultural prices, general economic slump and large-scale unemployment (Shaw, 2007). Nevertheless, members of the international staff at FAO were convinced that if the world's people could be adequately fed, the increased demand for agricultural products would stimulate growth in the agricultural sectors and beyond, creating a healthy economy and a healthy global population. They were convinced that by taking nutrition as a starting point that the wider situation would improve. However, as ultimate financial control remained external to

FAO, and many of the issues that needed to be addressed impinged on the economic policies of sovereign states, the conflict between the actors was ever present.

On October 16, 1945, the first conference of FAO was held at Chateau Frontenac, in Quebec. After years of campaigning by the champions of nutrition and months of vigorous debate between politicians, economists and nutritional experts across the world as to the best way to achieve freedom from want, the constitution was accepted, the Interim Commission dissolved and the Food and Agriculture Organisation was established with John Boyd Orr at the helm.

John Boyd Orr and the nascent FAO

John Boyd Orr, who was only invited to the Quebec conference by the British government as an observer, was, against his own country's wishes, appointed FAO's first Director General in October 1945. Despite accepting the office Boyd Orr was gravely disappointed with the limited powers of the new body, which he had fought so hard to create but now, in his view, only offered empty promises. He stated that FAO was contrary to all his hopes and voiced his frustrations when he argued: "The hungry people of the world wanted bread, and they were to be given statistics" (Boyd Orr, 1966, p.162).

Despite his pessimism Boyd Orr was determined to fulfil his remit. In the post-war era the Anglo-American world-view predominated, in "national security policies were based on alliances, atomic weapons, unilateral international

action, large peacetime militaries, and a system of managed free trade" (Staples, 2006, p.85). And yet under Boyd Orr FAO offered a counter-hegemonic view since "as an international organisation that included most of the world's countries, its suggestions and criticisms could not be ignored entirely, and it was therefore able to focus global attention on some of the shortcomings of the emerging world system." (ibid) The conflicts seen in the establishment of the organisation and the appointment of Boyd Orr, as he was only permitted to remain as its director general for two years, clearly demonstrated the conviction held by a number of its powerful member states that, although not entirely autonomous, FAO was seen as a potentially powerful organisation. Care, therefore, had to be taken to ensure there were safeguards that did not allow it to impinge on these member states' sovereignty, while at the same time the appearance of compliance was maintained.

John Boyd Orr's World Food Board Proposal

In the post-war situation food production was one of the main issues of concern. The world had to produce enough food to feed the expanding population. In 1950 the world population was estimated to be just over 2.5 billion and throughout the 1950s the annual growth rate was between 1.4 percent and 1.9 percent. However, in the ten years from 1962 the world population annual growth rate remained above 2 percent, creating additional pressure on food systems (United States Census Bureau, 2012). Despite this upward trend, many, including Boyd Orr and McDougall, believed that with the advancements in science an expansion in production was achievable. And yet by utilising

scientific methods to boost production fewer people would be needed to work the land and so increased industrialisation would be required to provide employment for former farmers. Different parts of the world faced different challenges. In the developing countries, according to the prevailing scientific theories of the time, there needed to be a shift from smallholder farms to larger entities and the introduction of modern agricultural methods. Since then, doubt has been cast on the wisdom of the drive to modernise agriculture in such a way, through the increased use of fertilizers and insecticides, and the move to create large monoculture-based farms or plantations (Tansey and Rajotte, 2008; Weis, 2007; Mulvany, 2010). In the developed countries it was the fluctuations in price that were described as the bane of agricultural producers, which needed to be addressed. Prices for wheat fluctuated dramatically during the years of the Great Depression as Shaw (2007, p.18) explained: “in nine out of the ten years in the decade between 1928 and 1938 the price of wheat on the world market fluctuated by 70 percent.”

And it was not just a case of producing more food. Having surpluses in certain agricultural products, such as grain, did not equate to everyone having a well-balanced, nutritious diet. Similar to the situation in developing countries, what was frequently at issue was not necessarily the amount of food but the quality of food being consumed and the ability of people to purchase it. Boyd Orr believed poverty was the reason for many people having insufficient nutritious food. He recognised the interdependency of nutrition and volume of trade but instead of

treating food as just another commodity he viewed it as an essential of life; thus his recommended route to prosperity started from the objective of improving people's welfare, rather than increasing trade. This stance, based on human needs, placed Boyd Orr in conflict with the prevailing capitalist states, which were driving forward their market-based model; itself implemented with pragmatic adjustments because of the use of protectionist practices by key agricultural producers, including the US, that led to surpluses in key crops (Sumner, 2008).

With clear objectives, and not wanting to lose the impetus generated through the creation of FAO, Boyd Orr established a Special Meeting on Urgent Food Matters to consider options to deal with the problems of food production and distribution; and surpluses and shortages. Prior to the second FAO conference in Copenhagen in September 1946, Boyd Orr produced the report, *Proposals for a World Food Board*, which outlined his grand plan. It called for the creation of a World Food Board that would "stabilise the prices of agricultural commodities on world markets, establish a world food reserve sufficient for any emergency, provide funds for financing the disposal of surplus agricultural products, and co-operate with organisations concerned with international credits" (Mayne, 1947, p.422).

Boyd Orr's grand and visionary plan went beyond providing a nutritious diet for all; he believed that these measures would be the catalyst for global post-war

economic prosperity; agricultural prosperity would be followed by industrial prosperity, and people would be brought together, increasing understanding and the opportunities for world peace. To implement this grand plan Boyd Orr envisaged the creation of three new international organisations as part of the Board: a credit facility; a buffer-stock regulatory agency; and a distribution agency for concessionary food and famine relief (Staples, 2006). With an emphasis on improving the health of everyone, the Board would be able to hold stocks of each important commodity and determine a maximum and minimum world price for these commodities, which it would buy if the world price fell and sell when the price exceeded the maximum, thus achieving agricultural price stabilization, (Shaw, 2007). As an additional safeguard, if people were unable to afford sufficient food the Board would be able to divert unmarketable surpluses and sell them at a concessionary price. Despite Boyd Orr's reasoned arguments FAO lacked two key prerequisites to create such a body: power and finance, and therefore needed the full support of member states.

At the Copenhagen Conference the World Food Board Preparatory Commission was created to develop a plan of action based on these proposals. Despite this seemingly positive move the proposals were opposed by the US, keen to promote the International Trade Organisation[23] as a way to manage the system of free trade; and by Britain, which was a big food importer struggling with its

[23] The forerunner to the General Agreement on Trade and Tariffs and ultimately the World Trade Organisation

war deficit. The USSR had considered supporting the creation of a World Food Board if the US and Britain had also given the proposal their support; however this was not forthcoming (Boyd Orr, 1966). Staples (2006, pp.88-89) argues that adherence to an external body's authority, such as the World Food Board, would "limit the US government's control over the country's agricultural production, its ability to use food aid to bring third world nationalists into the US fold and its leverage in garnering international goodwill through food aid initiatives." Unlike Boyd Orr, who viewed food as a basic human need, food was viewed by the US as a commodity and tool of political leverage in the fight for hearts and minds in the Cold War (Ruttan, 1990; Staples, 2006)[24].

Much to the bitter disappointment of Boyd Orr, the Commission did not favour the creation of a World Food Board; instead, it undertook an exhaustive examination of the basic economic and technical issues related to the production and distribution of agricultural products and then put forward its own recommendations. It did recommend the establishment of working stocks, famine reserves and price stabilization reserves but proposed that all these should be managed by each country, rather than through an international body. Instead of the creation of a World Food Board it recommended the replacement

[24] For example in 1964 legislation was passed by the US Congress as an extension of the PL-480, Food for Peace Programme (first established in 1954), that required PL-480 expenditures to be classified under international affairs and finance rather than agriculture; placed restrictions on sales to communist countries; and gave authorisation for the use of soft currencies, gained through agricultural sales, in support of counter-insurgency programmes (Ruttan, 1990). The Kennedy administration also attempted to use food aid as a tool to further its national interests when it tried to influence Algerian and Egyptian foreign policy as well as in South Vietnam (Staples, 2006)

of FAO Executive Committee, which comprised experts within the field of agriculture, with a World Food Council, consisting of 18 national representatives; and instead of an independent agricultural credit facility FAO would offer advice to member countries applying to the World Bank and other development lending bodies. (Staples, 2006) The World Food Council emphasised industrial development, full employment and self-help, rather than regulating supply and increasing demand. At the same time, it removed some authority of the director general and his secretariat by placing further controls on budgets and reviews on programme progress.

By taking nutrition as his main aim Boyd Orr argued that a centrally organised system to stabilise prices, establish a reserve and provide financial support for agricultural development would prove beneficial in the fight against hunger. These actions would have impacted on the sovereignty of member states, increased the autonomy of FAO and acted as a stimulus for greater interdependency within the international system. Arguably none of which the powerful member states, most notably the US and Britain, wished to encourage (Boyd Orr, 1966; Staples, 2006). And so, by maintaining national control of working stocks, famine reserves and price stabilisation reserves the powerful member states remained in control of the food production and distribution and protected their own autonomy, while at the same time limiting that of FAO.

The replacement of FAO Executive Committee with the World Food Council was yet another blow to Boyd Orr as national interests took precedence. The final demonstration of the powerful states' refusal to grant real power and autonomy to FAO can be seen in the decision to grant it an advisory role to the World Bank instead of entrusting it with independent financial control. Had Boyd Orr's World Food Board plans been accepted FAO would have become an authoritative organisation able to stimulate agricultural production and distribution, with economic tools at its disposal. However Boyd Orr's hopes were defeated.

Boyd Orr was bitterly disappointed with the outcome and resigned as Director General (Boyd Orr, 1966). He stayed in office until a replacement was found and in that time dedicated his energies to technical missions, agricultural development in the Middle East and Africa and the establishment of several regional offices. He left FAO in April, 1948.

Norris E. Dodd's International Commodity Clearing House vision

Norris E. Dodd was appointed as the next Director General of FAO, and was in the role from April 1948 to December 1953, during which time he oversaw the move of FAO's headquarters from Washington to Rome. Having successfully run a number of agricultural businesses, as well as a department within the US Department of Agriculture, Dodd was well qualified for the role (Abbott, 1992).

Although he had seen the reluctance of member countries to support a larger FAO or the establishment of formal global regulation, he himself had supported Boyd Orr's proposals for a World Food Board (Shaw, 2007). He therefore attempted to salvage what he could from the situation when asked for a report on the underlying causes of emerging commodity trade problems. In the report he highlighted issues surrounding food and equipment distribution in countries outside the dollar area and food surpluses within the dollar area; arguably the same problems that had existed for some time. Working with his assistant director general, Sir Herbert Broadley, and Professor John Condliffe, of the University of California, Dodd drew up proposals for an International Commodity Clearing House (ICCH), with an operating budget of US $5 million (Staples, 2006). It was proposed that this organisation would purchase surpluses within the dollar area, sell them for soft currencies outside the area or trade for raw materials, and in order to feed the hungry, sell at a concessionary rate any remaining foodstuffs. In this way Dodd and his colleagues hoped to distribute food surpluses without disrupting regular commercial markets and then using the profits generated to create buffer stocks, which would help stabilise key commodity prices.

Similar to the fate of Boyd Orr's logically argued proposals, Dodd's plan was rejected outright by member countries, led by the US, Canada, Australia, New Zealand and France. Again, instead of accepting proposals put forward by FAO director general, the member states created a different type of body with limited

authority, in this case the Committee on Commodity Problems (CCP). Although surpluses were discussed by the CCP, action was tentative and limited.

The US went a step further in addressing the issue of surpluses by passing their own Agricultural Trade Development and Assistance Act 1954, known as PL 480. The Act led to a number of problems: the cost of storing the surplus produce (an estimated US $1 million a day) threatened to undermine prices; the accumulation of non-convertible currencies in US coffers; strained relations with other exporters; and the dependency of deficit countries on American produce (Beringer, 1963; Ruttan, 1990; Staples, 2006). The Act demonstrated that: “the US was not so much opposed to the theory and operations behind the proposals for the World Food Board or the ICCH as it was to moving the locus of decision-making out of Washington” (Staples, 2006, pp.98-99). Although a costly operation, the Act dealt with US surpluses, at the discretion of the US, and was domestically popular and so received significant financial support from Congress.

Denied an opportunity to implement a grand scheme to improve the global governance of food and agriculture, and following in the footsteps of his predecessor, Dodd tried to make the best of the situation by concentrating his energies on technical assistance, often with the funds and support of partner organisations, such as the UN’s Expanded Programme for Technical Assistance, UNICEF and the International Labour Organisation (FAO, 2011c).

He helped create the International Rice Commission in 1949, co-ordinated an attack on a plague of desert locusts in the Arabian Peninsula in 1952 and organised a mass vaccination against rinderpest in the Middle East, Africa and Asia (Diouf, 1995). The information-gathering role of FAO also expanded at this time with the World Census of Agriculture in 1950, as well as the introduction of the annual crop outlook reports.

All these activities were seen as acceptable by the member states that had worked for an advisory body. As the first leaders of FAO fought to create a global organisation capable of managing the world's resources for the benefit of the world's people, and in so doing change global governance structures, its member states, most notably the large agricultural producers such as the US, Canada, Australia, New Zealand and France, successfully thwarted each new threat to their autonomy, while at the same time recognising the problems facing the poor and lamenting their plight. By establishing the Committee on Commodity Problems instead of the International Commodity Clearing House the powerful states had again strengthened their position as the autonomous actors. Interdependence was further limited by the unilateral actions of the US through its Agricultural Aid and Assistance Act and the use of surplus distribution as an aid to obtain its foreign policy objectives.

The next director general, Philip Cardon, proved to be too sensitive to withstand the pressures of managing a large public organisation and resigned in 1956

after two years in the role (Abbott, 1992). Following a brief period under the stewardship of Herbert Broadley, the helm of FAO was taken in November 1956 by a man many regard as its finest director general, Binay Ranjan Sen, of India.

B. R. Sen's ambitious Freedom from Hunger Campaign

Educated in India and Britain B. R. Sen had risen through the ranks of the Indian civil service and had been ambassador to a number of countries, before taking on the role of director general. But it was his credentials as a citizen of one of the largest developing countries and his first-hand experience of the Bengal famine that ensured he made the role his own. He presided over FAO during its most successful period in which its budget increased and its position within the global governance of food and agriculture was relatively unchallenged. During his time in office FAO's annual budget increased from US $7 million in 1958 to US $83.5 million in 1967 (Staples, 2006); he witnessed the independence of many former colonies, which then required technical assistance; he brought in many new voices into the debate through the Freedom from Hunger Campaign (FFHC); led the first World Food Congress in 1963; and oversaw the creation of the World Food Programme (Abbott, 1992).

Despite opposition from key agricultural producers, the FFHC, launched in 1959, was instrumental in bringing new voices into the global debate on combating hunger, such as NGOs, churches and their leaders, including Pope John XXIII, the Islamic Congress, philanthropists, governments and individual

citizens, as a way of side-stepping member countries not interested in FAO involvement. (FAO, 2011c; Catholic Herald, 1963) By utilising a bottom-up approach many FAO projects encouraged local populations to grow their own food, with the broader aims of enabling countries to conserve their foreign exchange resources and to insulate themselves from the volatility of the commodity markets. The cultivation of indigenous seeds to help improve the quality of crops and decrease the reliance on imported seeds was also promoted. Unfortunately these aims were not ultimately successful as problems surrounding seed ownership and market volatility are dispiritingly familiar in the twenty-first century.

The Eisenhower administration did not support the aims of the FFHC and in April 1959 the US representative to FAO Council emphasised the importance of the development of trade, disposal of surpluses, focus on scientific research efforts and the global division of labour in regards to agriculture, thus contradicting the aims of the FFHC to combat hunger and malnutrition and promote indigenous food production. However, at the same time, there was a shift in Eisenhower's policies from "trade and aid" to "food for peace", which was then adopted and expanded by President Kennedy, who emphasised the importance of development over surplus disposal and small projects to feed children and educate farmers (Staples, 2006). Even so, the Food for Peace programme was still used as an instrument of US foreign policy.

By the early 1960s the US had shown interest in establishing a multilateral aid agency for the dispersal of famine and disaster aid; an idea supported by other developed countries that also had surpluses to move, and were therefore keen to bring the US into a joint decision-making mechanism. To fulfil this need in 1963 the World Food Programme (WFP) was created, and in the process, argued Abbott (1992), met two of Boyd Orr's World Food Board objectives: to establish world food reserves against periodic crop failures; and to finance agricultural surplus disposal. FAO played an important role in the establishment of the WFP by providing administrative services and being jointly responsible for the appointment of its head. In addition, 20 percent of the food stocks were available to FAO's director general to be allocated at short notice for emergency relief.

Nevertheless, the WFP was, and still is, an organisation independent of FAO and, despite its humanitarian remit, had been engineered to serve developed countries' interests. Abbott (1992) argued that the WFP helped countries dispose of their burdensome surpluses and benefit from shipping contracts and in return the developing countries faced depressed prices for their own producers as food aid flooded their markets, which in turn removed the urgent need for recipient governments to promote local agriculture and instead introduced local people to new consumer tastes, and thus drove the demand for imports.

Although there were a number of nationally-based bodies competing within the field already, such as the US Food for Peace programme, the WFP was the first global organisation to be created within the global governance system since the establishment of FAO. Even so, during this period FAO was virtually the only source of expertise in the governance of food and agriculture (Independent External Evaluation, 2007). The WFP, even in its first years, channelled significant amounts of aid. By 1970 there had been 550 economic development projects in 88 countries funded through the WFP, demonstrating that the financing of global agricultural aid and development projects was an increasingly high priority at this time. By the early 1980s the resources pledged to the WFP annually had reached US $1,000 million (Abbott, 1992; Staples, 2006).

Alongside the creation of the WFP Sen's energies, despite opposition from the US, were channelled into the FFHC, which reached its zenith at the World Food Congress in 1963 - a showcase for FAO's new approach to agricultural development. As part of this drive Sen convened a Special Assembly on Man's Right to Freedom from Hunger, reconnecting with the founding principles of the organisation (FAO, 1963). In June 1,300 private citizens, academics, representatives from NGOs and governments from over 100 countries attended the Congress.

US President Kennedy summarised the understanding of the issues within the international community and yet the ultimate dilemma when he spoke at the World Food Congress:

> *For the first time in the history of the world we do know how to produce enough food now to feed every man, woman and child in the world, enough to eliminate all hunger completely...We have the ability, as members of the human race. We have the means; we have the capacity to eliminate hunger from the face of the earth in our lifetime. We only need the will* (Kennedy, 1963 p.2-3).

The new president of the World Bank, George Woods, responded to the call to action and established a joint funding arrangement with FAO in 1964 to create the Cooperative Programme; an arrangement that fulfilled Boyd Orr's fourth aim in his grand plan, to cooperate with organisations concerned with international credits. The Independent External Evaluation report (2007, p.55) described this arrangement as "an effective and complementary use of the international agricultural capacity existing in each agency." This programme enabled FAO to expand its technical capabilities, a worthy endeavour, but one which again was clearly sanctioned by the developed countries, instead of the more radical role of managing the world's resources and playing an active role within a reconfigured global governance architecture.

Sen stepped down from the helm of FAO in 1967, constitutionally unable to stand for election again. His FFHC had led to greater public realisation of the extent of world hunger as he promoted the involvement of a number of non-state actors. However, despite his drive and ambition for FAO, Sen was unable to bridge the gap between the national interests and those for the greater good of humanity, thus highlighting the source of real power within the international system.

Although FAO saw a substantial increase in its budget under Sen's directorship and still enjoyed a position of authority as a global actor within the global governance of food and agriculture its successes were limited by the action of its member states and the creation of the WFP. Although the WFP may have met two of Boyd Orr's objectives: establishing world food reserves and the financing of agricultural surplus disposal the WFP itself was not controlled by FAO. Instead it diluted FAO's authority. Powerful members states were able to dispose of their surpluses under their own terms and the international structure, which had been responsible for creating the surpluses and shortages, remained unchallenged. Again the member states had maintained their control and at the same time undermined FAO.

Sen endeavoured to break the stranglehold of the states as the main actors within the system by including a diverse range of organisations and individuals in the debate on hunger and malnutrition as a moral issue. In his way he created

a global community of keen advocates for his policies but ultimately the most powerful member states maintained their authority through the disposal of surpluses and control of finance. FAO may have excelled as an advisory body in its partnership with the World Bank through technical programmes but it lacked the authority and autonomy to demand real change within the international system.

His successor, Addeke Henrik Boerma, oversaw the dismantling of much of Sen's progress as the emphasis shifted from the ideals of the FFHC, placing human needs foremost, to those expounded by the Green Revolution, which placed more emphasis on the technical advancements in agriculture. Staples (2006) argued that under Boerma FAO lost its leadership, its mandate became fractured into several different organisations on food and agriculture and the organisation itself became increasingly politicised.

Conclusion

The champions of nutrition had envisaged a different and better post-war world as they fought for the creation of an international organisation, with the authority and finances to change the ailing food production and distribution systems, to enable all peoples of all nations to access a nutritious diet. Knowledge and the epistemic communities that provide it are important, according to cognitivists, such as Haas (1993), and yet even a unified epistemic community, such as the champions of nutrition, was not able to persuade the powerful states to cede any national sovereignty to FAO, even in a time of crisis. These idealistic

individuals had hoped that a well-fed world population and an optimally functioning food system would have the power to lift the world economy and drive development for the benefit of everyone. But even before its birth FAO had failed to live up to their expectations, a disappointment so profound that its first director general, Boyd Orr, had called for it to be abandoned in its proposed form and created again (Boyd Orr, 1966). Despite this damning criticism he launched himself into the task of extending its remit and regaining some of the impetus that had inspired its founders at Hot Springs. And yet his efforts came to nought, as did many of those of his successors; great men like B. R. Sen driven to fight the scourge of hunger but eventually defeated by nationalistic interests and the compelling force of the status quo.

As the world entered the 1970s FAO faced mounting criticism for not tackling global hunger. (Society for International Development, 1978; WDM, 1974; Shaw, 2007) However many of the contributing factors to the food crisis of the early 1970s were beyond the control of the organisation. World grain production declined for the first time in 20 years because the monsoons had failed two years in a row and the yields of the green revolution had started to plateau. This situation was compounded by the actions of the US and Canada, which had set aside agricultural land to avoid surpluses and the USSR's discrete importation of vast quantities of subsidised grain after a disastrous harvest. In addition the oil producing countries had sharply increased the price of oil, which had a direct impact on the cost of fertilizer (Shaw, 2007). And these problems were taking

place in a world in which many countries were experiencing population growth rates of three percent or more (Rogers, 2008a) and concerns had been raised over the earth's carrying capacity (UNEP, 1972). Against this backdrop the world faced its worst food crisis since the end of World War Two, with a predicted 40 million people in 30 countries at risk of starvation (Rogers, 2008b), and FAO had to answer to its critics at the World Food Conference in 1974. The next chapter will chart FAO's response to the global food crisis of the 1970s and its development through to 2007 when it faced the most extensive evaluation in its history and a call for complete reform.

Chapter Five:
FAO in a Globalised and Fragmented World (1974-2007)

Introduction

The champions of nutrition had envisaged a different and better post-war world as they fought for the creation of an international organisation, with the authority and finances to change the ailing food production and distribution systems, to enable all peoples of all nations to access a nutritious diet. These idealistic individuals had hoped that a well-fed world population and an optimally functioning food system would have the power to lift the world economy and drive development for the benefit of everyone. However despite Boyd Orr's best efforts, as FAO's first director general, he struggled to create an organisation with convincing authority, as did many of his successors. (Boyd Orr, 1966)

This chapter will examine the history of FAO from the World Food Conference in 1974 until 2007, when the reform of the organisation began. Initially there will be an examination of the outcomes and criticisms of the World Food Conference, which will be followed by a brief assessment of the impact of the structural adjustment programmes of the 1980s and then FAO's response to increasing food insecurity from the 1990s onwards, This chapter will also consider the roles of the different actors, including states, international organisations, NGOs and foundations, multinational corporations and farmers, which all operate within the same globalised and fragmented system.

FAO's role questioned as world food crisis loomed

As the world entered the 1970s FAO faced mounting criticism for not tackling global hunger. (Society for International Development, 1978; WDM, 1974; Shaw, 2007) However many of the contributing factors to the food crisis of the early 1970s were beyond the control of the organisation. World grain production declined for the first time in 20 years because the monsoons had failed two years in a row and the yields of the green revolution had started to plateau. This situation was compounded by the actions of the US and Canada, which had set aside agricultural land to avoid surpluses and the USSR's discrete importation of vast quantities of subsidised grain after a disastrous harvest. In addition the oil producing countries of OPEC had sharply increased the price of oil, which had a direct impact on the cost of fertilizer (Shaw, 2007), as well as the cost of transportation and running agricultural equipment.

For generations there had been a lack of development in rural areas in developing countries, with less than four percent of World Bank funds directed to increasing the productivity of subsistence agriculture and development programmes managed by urban elites with little concern for rural areas (WDM, 1974). In developed countries there had been an increase in demand for meat, most notably beef, which drove the consumption by animals of precious grain stocks and forced the need for imports in countries such as Britain.

These problems were taking place in a world in which many countries were experiencing population growth rates of three percent or more; in global terms this meant an additional 25 million tonnes of grain, as well as other food, would be required annually to feed everyone (WDM, 1974; Rogers, 2008a). Alongside these problems concerns had also been raised over the earth's carrying capacity (UNEP, 1972).

All these factors placed the agricultural system under increasing strain and meant that by 1973 the world faced its worst food crisis since the end of World War Two, with a predicted 40 million people in 30 countries at risk of starvation (Rogers, 2008b).

World Food Conference, 1974

By the late 1960s food security was rising up the international agenda again but despite the fact that freedom from hunger had been recognised as a fundamental right by the UN in the International Covenant on Civil and Political Rights in 1966, (UN General Assembly Resolution 2200A, 1966); UNCTAD had examined the world food problem in 1968 and FAO had held a Second World Food Congress at the Hague in 1970, the world was not prepared for the world food crisis of the 1970s. The culmination of the varying factors, most beyond the control of any one organisation, was not envisaged until it was too late and the world was already facing a potential catastrophe. The international community was judged on its actions.

The Society for International Development (1978, p53) argued that FAO was particularly underwhelming in its response.

> *The results of the Hague Congress were disappointing if one compares them with the magnitude of the problems the world was facing and those which would emerge later. In contrast to what happened at the First World Food Congress [1963] the Final Declaration neither analysed the world food situation in depth nor formulated any precise directives. Indeed it limited itself to generalities, not to say platitudes.*

FAO's The State of Food and Agriculture (1973) report raised the flag on the impending crisis, which it described as the most difficult since the years immediately after the war and yet there were few recommendations on how to tackle the problem.

Discussions of the food crisis took place in September 1973 at the Summit Meeting of Non-Aligned Countries, which called for an emergency joint conference of FAO and UNCTAD to formulate a programme of international cooperation (Society for International Development, 1978). Henry Kissinger, US Secretary of State, also called for a World Food Conference to be held under the auspices of the UN to discuss ways to tackle the increasingly urgent problem, which he admitted was beyond the ability of any one country to resolve.

The conference was established by the UN General Assembly with a small secretariat under the UN Economic and Social Council. Preparatory meetings were held in New York, Geneva and Rome. The preliminary work was divided into three main areas: investment in agriculture, which it was estimated needed to be increased from US$ 1.5 billion to around US$ 5 billion; the need to rebuild and then maintain adequate food reserves preferably under international control or at least international co-ordination; and following strong pressure from the developing countries, the issues surrounding trade reforms (WDM, 1974).

Following their deliberations, Sartaj Aziz, director of FAO's Commodities and Trade division, was charged with the production of the conference documentation; a role in which he had to balance the expectations of the developing countries, the questionable political will of the developed countries as well as the 'constant tug of war' he noted between the FAO and the US team led by John Hannah, financed by the Ford and Rockefeller Foundations, which attempted to take over the production of the conference documentation arguing that FAO could not be trusted to give objective advice (Shaw, 2007).

Finally the conference was held in Rome, although not at FAO headquarters, between November 5 and 16, 1974 with the participation of 135 state representatives, five UN bodies, seven UN specialized agencies, including FAO, which had successfully provided reports for the conference, 26 observers from

intergovernmental organisations and representatives of 161 international and national NGOs were also invited to participate. (UN, 1975)

With news of the continuing ‘grain gap’ and ‘fertilizer gap’ pledges by developed countries should have been forthcoming to render swift assistance, however only Canada responded positively. Instead a situation emerged that resulted in a distinct lack of progress: the developed countries, led by the US, blamed the recently formed OPEC coalition for the food crisis due to the sharp increase in oil prices, and the oil producing countries refused to accept ultimate responsibility for the situation and instead blamed the West for its continued inaction. In his opening statement the Iranian Minister of the Interior, Jamshid Amouzegar, argued: “Years of neglect, inaction and unfair policies by the West are the root cause of the present food crisis.” (Amouzegar quoted in WMD, 1974, p10) Each group refused to increase their contributions before their opponents had done so first.

Alongside the continued ideological wrangling the rhetoric aimed high with calls for the complete eradication of hunger. Henry Kissinger called for all governments to accept the premise: “that within a decade no child will go to bed hungry, that no family will fear for its next day’s bread, and that no human being’s future and capacities will be stunted by malnutrition.” (Kissinger quoted in Shaw, 2007, p113). This goal formed the basis of the first laudable resolution agreed by the conference (UN, 1975, p1):

> *Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties. Society today already possesses sufficient resources, organisational ability and technology and hence the competence to achieve this objective.*

However despite the high aims the lack of progress was frustrating, especially as the grain gap and fertilizer gap were relatively small in global terms. The grain gap, estimated to be about ten million tons, was less than one percent of the annual grain consumption and less than two percent of the grain fed to cattle. And the fertilizer gap was also small as Rogers argued: “The fertilizer gap amounts to one percent of world fertilizer usage ... and considerably less than the amount of fertilizers used annually in the United States for non-agricultural purposes like golf courses, lawns and public parks.” (WDM, 1974, p6) He concluded that the achievements of the first World Food Conference were negligible in terms of real progress to tackle hunger.

World Food Conference: Outcomes

Delegates at the conference agreed to establish the World Food Council, through the UN General Assembly, which would report to the UN through the Economic and Social Council. It was to be a ministerial body based in Rome with the remit of programming policy on emergency food aid and investments for agriculture in developing countries.

The conference also proposed the creation of an Agricultural Development Fund. The arguments against such a fund were numerous from the developed countries, with Germany publicly declaring that she would not contribute. The US was also against such a proposal and argued it was not needed as the World Bank was the best place through which to direct any contributions. Rogers in his report for WDM (1974) argued that the US was concerned about the potential loss of influence, both politically and commercially, if financial contributions by OPEC resulted in a shift in voting rights.

Despite the arguments it was agreed to establish an international financial institution as a specialised agency of the UN to finance agricultural development projects primarily for food production in developing countries. The International Fund for Agricultural Development (IFAD), one of the major outcomes of the World Food Conference, was established in 1977. It recognised that one of the most important insights of the conference was that “the causes of food insecurity and famine were not so much failures in food production but structural problems relating to poverty, and to the fact that the majority of the developing world’s poor population are concentrated in rural areas.” (IFAD, 2015)

World food security was the most important question at the conference and in order to tackle the issue three areas were discussed; the creation of a global information and early warning system on food and agriculture, reserve stocks and food aid. The first concept was accepted by all countries except the USSR

and China, which expressed their reservations. They argued that such an information-gathering system, could jeopardise state sovereignty, contain information of a strategic nature and contribute to the speculative operations of multinational companies (Commission of the European Communities, 1974).

The differences of opinion between the developing countries, which had called for a system of emergency reserve stocks of 500,000 tonnes of cereals, and the developed countries that rejected the call were partially addressed in the International Undertaking for World Food Security project, known as the Boerma Plan. However as the issue had not been resolved to any side's satisfaction the Commission of the European Communities (1974) foresaw difficulties in the future. The conference also accepted a recommendation that food aid, from 1975, should be increased to a minimum of 100 million tonnes per year. Australia and Canada both stated their willingness to increase their food aid contributions but the US and the EEC confined themselves to accepting the overall objective of 10 million tonnes.

Soon after the conference the Committee on World Food Security (CFS) was established as an intergovernmental body within the UN system to oversee the implementation of policies to eradicate hunger and malnutrition within ten years; the aim set down by the conference. The CFS will be discussed in chapter eight. The Society for International Development (1978) admitted that the final declaration of the World Food Conference contained interesting conceptual

innovations and guidelines that may have improved the world food situation. However the society concluded (1978, p63) that “once the immediate crisis has passed, the declaration and its proposals were quickly forgotten and this problem, unparalleled in gravity and explosive potential, has been allowed to drift once more into the background.”

Despite all the rhetoric of the conference, which had called on all peoples to “work together to bring about the end of the age-old scourge of hunger” (UN, 1975, p7) the food crisis of the early 1970s was not effectively tackled by the collective action of the international community, as states or international organisations. The unresolved issues, such as the disagreements over reserve stocks, problems of trade and the balance of payments all continued into the ‘lost development decade’ of the 1980s.

Again the actors involved in the World Food Conference had agreed that there was an urgent challenge facing the world, with millions facing starvation. However, even with the US acting as hegemon and leading the way, there was little consensus on the best way in which to tackle the multi-faceted problems. With this level of complexity and uncertainty, the epistemic community should have been in a stronger position to offer advice to decision makers, according to Haas (1992). This was not the case: national interests, especially focused on Cold War dynamics, took precedence, as demonstrated through the US’ support for the World Bank as a channel for funds rather than the creation of a new

fund, and opposition to global data gathering on food and agriculture by the USSR and China.

Structural Adjustment in the 1980s and 1990s

Following their disastrous economic performance in the 1970s and the shock of the Third World debt crisis of 1982 many developing countries were left struggling to survive in a world hit by recession and rising interest rates in the early 1980s (Svendsen, 1996). In this financial climate many countries agreed to participate in the World Bank's Structural Adjustment Programmes (SAPs) in return for loans. For example; "By 1989 37 African nations had signed up for over $25 billion in Western donor support." (Ayittey, 2005, p.154) In fact, aid from multilateral sources increased from only 13 percent of the total in 1970 to 34 percent in 1987 (Ayittey, 2005).

The controversial SAPs, which introduced far-reaching 'conditionalities', were designed to achieve macroeconomic stability, increase economic efficiency and enhance economic growth (Demery, 1994) by implementing a package of reforms drawn up by the IFIs. Hoogvelt (2001, p.181) argues that "the aim of adjustment was to shatter the dominant post-war, state-led development paradigm and overcome problems of development stagnation by promoting open and free competitive market economies, supervised by minimal states."

The SAPs were part of the emerging market-based neoliberal agenda. Gaining dominance in national and international politics neoliberalism was promoted in

the US through the dramatically changed monetary policies of Paul Volker, who became the head of the US Federal Reserve in 1979, Ronald Reagan, who was voted in as US president in 1980 and in the UK by Margaret Thatcher, who became prime minister in 1979. (Harvey, 2005)

The measures implemented through the SAPs were wide ranging and included currency devaluation, deregulation of prices and wages, reduction of public spending on social programmes and state bureaucracies, removal of food subsidies and other supports on basic necessities, trade liberalisation, privatisation of parastatal enterprises and expansion of the export sector, often at the expense of food production for local populations. (Hoogvelt, 2001)

SAPs had a dramatic and detrimental impact on developing countries and their people: unemployment increased and wages decreased as governments suddenly reduced their state apparatus; sharp declines in real incomes followed devaluation, which, combined with interest rate liberalisation, forced governments to borrow more (Hoogvelt, 2001). This had serious consequences as Berry (1995, p.367) noted: “In Tanzania, for example, the purchasing power of urban workers’ wages fell 50 percent between 1980-1984; in Ghana, urban incomes fell by 40 percent in the same period.” Producers proved ill-equipped to deal with increased competition from cheap foreign goods when trade was liberalised and under a system of privatisation assets and enterprises were bought by either the governing elites or foreign investors.

Agriculture was hit hard by SAPs as food security was sacrificed for the production of cash crops for export. Instead of playing a central role in development by raising the nutritional standards and feeding the expanding population farmers and plantation owners focused their efforts on growing luxury crops, such as coffee, cocoa, cotton and groundnuts (Stryker and Ndegwa, 1995) for the world market as part of the drive towards globalisation. This led to poor agricultural performance, rural poverty, child malnutrition and a lack of food. Stewart (1994, p.102) argues that the neglect of agriculture affected the balance of payments and "for countries with chronic foreign-exchange shortages, any substantial dependence on food imports creates vulnerability." As countries concentrated on primary cash crops they became increasingly vulnerable in the 'free market' leading to their marginalisation in the world economy, which had a devastating impact on their terms of trade. "About 25 percent of the purchasing power of the exports of sub-Saharan Africa as a whole was lost over the 1980s." (Stryker and Ndegwa, 1995, p.381)

The neoliberal policies advanced as conditionalities by the IFIs have been instrumental in the drive towards globalisation, which Kenichi Ohmae claimed would lead to a "borderless world" and an "interlinked economy of one billion people, in which transnational companies are bringing the promise of a better life with increased security and prosperity" (Ohmae quoted in Tickner, 1999, p.43). However, Wilkin (1999) argued the implementation of the neoliberal

economic policies of liberalisation, privatisation and deregulation have disempowered large sections of the world's poor, moved resources and wealth from the developing South to the developed North and undermined democracy as wealth and power are secured by the dominant social forces, which act in their own best interests. Hoogvelt (2001, p.180) also argued that globalisation benefits the developed countries at the expense of the developing world as the IMF and World Bank exert their considerable influence "to affect profoundly the organisation of production and trade in the periphery to the benefit of the core of the world capitalist system."

In the 1990s IFIs changed their approach to structural adjustment by introducing Poverty Reduction Strategy Papers (PRSPs), designed to encourage broader participation and greater ownership of economic programmes. This change in policy followed criticisms of the first phase of adjustment as acknowledged by the World Bank. In a retrospective report on structural lending it states (2001a, p.xi) "The first decade of adjustment lending raised concerns that the emphasis on getting relative prices right paid too little attention to the social impact of countries' economic adjustment and to institutional constraints in adjusting countries." The report highlights (2001a, p.ix) the "episodes of disappointing country economic performance and uneven progress in policy formation" in the 1980s but states that "the overall quality of Bank adjustment lending improved markedly during the 1990s." Poverty-focused adjustment operations in the

1990s included measures to protect the poor through social expenditures and safety nets.

Despite the criticisms of structural adjustment the problems facing agriculture, especially in Africa, go back further than the early 1980s. Mkandawire (1999) acknowledges that in the decades that followed the post-colonial era Africa was the only major developing region that suffered a decline in per capita levels of food production, mainly as a result of policies that favoured industry or urban development. According to the World Bank (1997, p.48) these anti-agricultural policies, which included implicit and explicit taxes, "contributed to alarming declines in sub-Saharan Africa's agricultural growth rates: from an annual average of 2.2 percent in 1965-73 to one percent in 1974-80 and 0.6 percent in 1981-85." Despite structural adjustment, which was supposed to reverse the decline, African agriculture in the late 1990s still lagged behind on irrigation, having only four percent of land irrigated, compared with 26 percent in India and 44 percent in China. Mkandawire (1999) argues that this makes African agriculture very weather dependent.

Although the introduction of PRSPs may be seen as an attempt to address the lack of ownership and participation, they still promote the neoliberal agenda. The Jubilee South Pan-African Declaration (quoted in Bond, 2006, p.42) stated: "The poverty programmes are expected to be consistent with the neoliberal paradigm including privatisation, deregulation, budgetary constraints and trade

and financial liberalisation. Yet these have exacerbated economic and social crises in our countries."

SAPs and their successors, PRSPs, were seen as having a negative impact on the poor and food insecure. In the wider sphere market globalisation and liberalisation were seen by developed countries, mainly major food exporters, as having a largely positive effect. Trade was viewed as helping to reduce fluctuations in food consumption, relieving part of the burden of stockholding and promoting economic growth. Developing countries and NGOs operating in the field of food security were largely critical of trade liberalisation and the SAPs, arguing that there was a lack of accountability in relation to the transnational corporations operating in the global economy (Shaw, 2007).

Growing Food Insecurity: FAO response

International Conference on Nutrition, 1992

At the beginning of the 1990s it was widely accepted that the number of people without access to enough food to meet their daily needs was approximately 800 million people (US Dept. of Agriculture, 1995). In addition, there was an estimated 40 percent of the world's population, two billion people, with deficiencies in one or more micronutrients (FAO, 1995). However, according to FAO's own Hunger Portal (FAO, 2014e) the number of people who were undernourished could have been as high as 1,015 million. In an effort to address these pressing issues FAO and the World Health Organisation (WHO)

combined forces and convened the first global conference devoted to nutrition. The International Conference on Nutrition 1992 was held in Rome at FAO headquarters and was attended by representatives from 159 countries and the European Community, 15 UN organisations and 144 NGOs.

During the three years prior to the conference governments prepared papers on the nutritional situation in their own countries, paying particular attention to the factors influencing the nutritional status of their people and identifying the most vulnerable groups. The conference agreed the World Declaration on Nutrition and Plan of Action for Nutrition, with nine priority areas highlighted. Over 73 countries created National Plans of Action for Nutrition (NPLANS), with FAO playing a fundamental technical assistance role. In addition, many governments, NGOs and international agencies continued with the work started in preparation for the conference (FAO, 1995).

World Food Summit, 1996

In the first half of the 1990s there had been at least ten international conferences covering a wide range of issues from the environment and development to women. These also included the World Conference on Overcoming Global Hunger 1993 and A 2020 Vision for Food, Agriculture and the Environment 1995 (Shaw, 2007) Despite this plethora of international conferences, leading to possible conference fatigue, FAO, following the election of Jacque Diouf, started to put the case forward for a world summit to discuss food.

It was acknowledged (US Dept. of Agriculture, 1995) that action needed to be taken to address the dual problems of continued chronic malnutrition faced across the developing world, with 88 countries categorised as low-income food-deficit countries (LIFDCs), and the falling aid budgets for developing country agriculture, which had declined from US$ 10 billion in 1982 to US$ 7.2 billion in 1992[25].

In addition, it was argued that since the World Food Conference in 1974 there had not been a high-level meeting, with heads of state present, to assess the state of global food security. The multifaceted nature of food security necessitated a response from many different government departments, from the ministries of agriculture to the ministries of foreign affairs, trade and economy; a situation only possible with the personal participation of the heads of state and government. However, despite this desire to engage the heads of state and government it was also argued that this was not a pledging conference, nor would it create new financial mechanisms, institutions or bureaucracy (US Dept. of Agriculture, 1995).

At the World Food Summit, which was held in the FAO headquarters in November 1996, there were 186 participating countries, of which 41 were represented at the level of head of state, 15 at the level of deputy head of state,

[25] This figure is calculated in constant 1985 US dollars (US Dept. of Agriculture, 1995)

41 at the level of head of government and 15 at the level of deputy head of government (FAO, 1995).

The summit agreed the Rome Declaration and the Plan of Action, which contained seven commitment areas with a total of 27 objectives and targets. The declaration stated: “Everyone should have access to adequate and safe food and be free from hunger.” This may have been couched in the same terms as the Four Freedoms championed by Roosevelt (Roosevelt, 1941) five decades earlier but it did not move the debate forward.

According to Shaw (2007, p353) “critics argued that what the summit achieved was only a restatement of commitments acceptable to every government rephrased in the sustainable, participatory gender-sensitive, anti-poverty, environmentally-friendly terms of the moment.” The summit did not deliver any legally binding agreements, any new aid commitments nor were there any new institutional arrangements proposed. However, as FAO was attempting to reclaim its role as the central body to deal with global food issues any proposals for new institutional arrangements would have been unwelcome as they would have diluted its position further.

Nonetheless, the summit did help to create more coherence between governments and food agencies in discussions on issues of food security. It also

promoted the monitoring of progress made towards reducing chronic hunger, with the use of vulnerability and risk mapping.

FAO in its attempt to regain its position as the central organisation within the sphere of food and agriculture had convened the World Food Summit. States resisted pressure to make any significant changes to the status quo by deciding this was not a pledging conference, nor one to establish any new infrastructure, and thus limiting the progress possible even before the conference had started. However, despite this lack of commitment, FAO was still able to bring together a large number of state and non-state actors creating stronger networks focused on food security. These connections have helped to build the knowledge base and establish shared understandings for an expanding epistemic community.

Millennium Development Goals

The World Food Summit also put food security back at the top of the international agenda going forward into the twenty-first century, ensuring it would be seen as a priority for the Millennium Development Goals. In the opening lines of the *Rome Declaration on World Food Security* the delegates at the summit (FAO, 1996, p1) declared:

> *We pledge our political will and our common and national commitment to achieving food security for all and to an on-going effort to eradicate hunger in all countries with an*

immediate view to reducing the number of undernourished people to half their present level no later than 2015.

The vision for how this ambitious target was to be achieved was then set out in FAO's *The Strategic Framework for FAO: 2000-2015* which stated that the organisation's mission was "to help build a food-secure world for present and future generations" (FAO, 1999) through leadership and partnership. FAO acknowledged that it could only work within its own mandate and sphere of competence in a supporting role to states, recognised as the only entities with the capacity to achieve the goal, in what was termed "national responsibility and international solidarity" (FAO, 1999).

Following the Millennium Summit in 2000 189 member states and more than 23 international organisations signed the *United Nations Millennium Declaration* (UN, 2000a), which then led to the adoption of the eight Millennium Development Goals (MDGs) (UN, 2000b). The aim of eradicating extreme poverty and hunger was set out in the first MDG. Hunger was addressed in target 1c, the aim of which was to "halve, between 1990 and 2015, the proportion of people who suffer from hunger" (UN, 2015c).

Success in achieving the MDGs has been variable, across the different goals and across geographical areas. For example, global progress on MDG 4, reducing child mortality by two-thirds in the under-fives, has been substantial but insufficient. Overall figures show a global reduction of 49 percent between 1990

and 2013, a decline from 12.7 million to 6.3 million annually. (Gaffey et al, 2015) Additionally, the maternal mortality rate (MMR) has fallen from approximately 523,000 to 289,000 annually, a reduction of 45 percent since 1990. Gaffey et al, (2015, p.287) argue that: “Although not insignificant, this decline clearly falls far short of the MDG-targeted 75 percent reduction in MMR by 2015.” The success in tackling malnutrition has also been varied, from country to country and within countries. In Tanzania, for example, stunting has remained prevalent in the Kongwa district despite general improvements in child nutritional status at the national level. (Semali et al, 2015)

Jayati Ghosh (2015, p.320) argues that the challenges that continue to be faced require changing “economic strategies rather than tinkering with minor outcomes.” In the post-2015 SDGs Ghosh argues that the issues that need to be addressed, including persistence of extreme poverty, growing inequality, environmental degradation and climate change, will require a major change in approach but are still being met by relatively small answers. He argues (2015, p.321) “It is no longer credible to think that deregulated markets in a context of unfettered capital flows driven mostly by the pursuit of short-term profits or capital gains will deliver inclusive economic growth.”

There have been a number of criticisms levelled at the manner in which the MDGs were established. They were seen as created by only a few stakeholders with inadequate involvement of developing countries, they overlooked many

development objectives previously agreed and they were not adapted to national requirements (Fehling et al., 2013). Issues seen to play a key role in development were not included, such as sustainable development and peace and security, and some developing countries have lacked the capacity to collect the data required to track performance (Harris and Provost, 2013).

Ashwani Saith (2006) is very critical of the MDGs, from the manner in which they were created to their implementation, their omissions, as well as their continuance of neoliberalism. He traces the development of the MDGs from the International Development Goals (IDGs) as proposed by the OECD's Development Assistance Committee (DAC) in the late 1990s. Saith argues that a joint report on the progress of the IDGs by the UN, OECD, World Bank and IMF (UN, 2000c) drew strong criticism from NGOs, CSOs and even church bodies for its narrowing of the development agenda. Fukuda-Parr and Hulme, (2011, p.25) highlight the uproar the report created in the NGO networks that "were shocked that the UN Secretary-General would sign a document with the heads of the World Bank, IMF and OECD. This was seen as a betrayal. The anti-globalisation debates behind much NGO thinking were often framed in anti-market ideology and portrayed the World Bank and the IMF as the enemy." Clive Gabay (2011, p.491) argues that the connection with the donor-driven IDGs immediately "problematizes the idea of the MDGs as an automatically benign and apolitical set of goals and targets." He challenges the vision of development, which he argues is "inherently contradictory, dependent on

processes such as privatisation and subsidy reduction which, when implemented, have proven high social costs seemingly opposed to the sentiments embodied in the MDGs." (Gabay, 2011, p.492)

However, to create a development framework acceptable to the widest possible audience, and therefore, one that would offer the best possible chance of success, the 'message entrepreneurs' who helped to create the MDGs from the long development 'wish list' that had been growing throughout the 1990s had combined principles with pragmatism to achieve a deal. However, this had created a situation in which the MDGs, from a neoliberal growth perspective were seen as a threat to economic growth, and from an anti-neoliberal perspective, were seen as not being progressive enough. (Fukuda-Parr and Hulme, 2011)

Saith (2006, p.1170-1171) argues that despite its initial opposition to the MDGs the US unveiled the "so-called Monterrey Consensus, which effectively and firmly embedded the MDG implementation process within the mainstream neoliberal strategic and policy framework." In so doing the US was able to pay "lip service to the MDGs" whilst using the device to "further push the UN development agenda and policy instruments into close convergence with the neoliberal prescriptions." This top-down approach "leaves little space for substantive input from domestic populations" argues Liam Clegg, (2015, p.951) With a focus on benchmarking, Clegg highlights the criticisms levelled at the

MDGs as exclusive instruments and argues that “there is a tendency for benchmarking initiatives to crowd out the perspectives and interests of more marginalised agents.” (Clegg, 2011, p.951)

Critics also highlight the many omissions from the framework, which include reproductive health services for all; governance, human rights and democracy; gender empowerment; and decent work targets. These had been omitted for various reasons, argue Fukuda-Parr and Hulme (2011) as ‘message entrepreneurs’ attempted to create a list of goals that would gain near-universal acceptance.

Nevertheless, despite the criticisms, by setting the MDGs the international community has been able to focus its attention on certain, if limited, issues. These have included food security. This international attention enabled the FAO to set its sights on becoming the centre of excellence and an authoritative purveyor of knowledge and advice on food security (FAO, 1999). It is debatable whether this was achieved.

The MDGs and their successors, the SDGs, will be discussed in relation to FAO’s ability to provide GPGs through norms and standards setting in chapter nine.

Fragmentation in the food and agriculture arena

FAO is only one organisation operating within the diverse and wide-ranging arena of food and agriculture. States and different departments within states, groups of states, as well as a wide range of non-state actors, from NGOs and CSOs to foundations and multinational corporations, are operating at many different levels within this very complex and interconnected area. These actors all have different priorities and objectives, which shape the field within which FAO and the other international organisations related to food and agriculture, operate. Of course, in the midst of all these different actors, farmers have to produce the food. A full investigation of this complex situation is beyond the remit of this thesis; however a brief overview would be beneficial to aid understanding of FAO's role and position within this globalised and fragmented system.

States

At the national level many different government departments are involved, from agriculture to trade, from rural development to environment. All these different departments need to communicate within their own government and with respective departments in other governments. Departments within one state will have different approaches to any one issue as they strive to fulfil their remit and position themselves centrally within the state apparatus; essential to ensure budget allocations from central government, which are determined by the state's overall priorities. Traditionally agriculture has been given low priority, especially in states where farmers are seen as marginal groups.

There are also different groups of states, such as the G7/G8, G20, the BRICS (Brazil, Russia, India, China and South Africa) and the G77 that all have their own agendas relating to agriculture; politics, economics and ideology all play a role. This is clearly seen with the promotion of the neoliberal agenda by the US and UK from the 1980s onwards. However, as the economies of states, such as China, Brazil and India have grown the balance of power has shifted. Murphy et al (2012, p.5) argue that this has made the likelihood of a meaningful outcome of the latest round of WTO negotiations improbable. This they argue is because "the new emerging powers are not as wedded to open trade, deregulated markets and deregulated capital flows as are the governments they now challenge (the United States and the European Union in particular)."

Within this continuously evolving political and economic situation FAO has to operate through co-operation and partnership building. States, especially those from different groups, do not form a homogenous group, which makes consensus building on any issue challenging. The role that states play in FAO in relation to the organisation's reform and its provision of GPGs will be discussed in greater detail in the following chapters.

International Organisations

At the international level FAO is only one international organisation, among many, that deals with food and agriculture. There are over 20 IOs and special advisors that operate in this area, from the Office of the High Commissioner for

Human Rights to the UN Environment Programme. Alongside these IOs are the IFIs, the World Bank and IMF, and the WTO, which as previously discussed, play a significant role in policy implementation that directly affects agriculture. However, FAO is the only IO as a specialised UN agency that has a mandate in all areas connected to all aspects of food and agriculture.

The WFP and IFAD, as the other Rome-based agencies, are FAO's traditional partners; there is close co-operation between the three agencies. The WFP was established in 1961 and is the largest humanitarian agency fighting hunger. It delivers food at times of emergency and when the emergency has passed to help people rebuild their lives. Every year it gives assistance to millions. For example, in 2013 it reached 80 million people with food assistance in 75 countries; delivered 3.1 million metric tonnes of food, 86 percent of which was purchased in developing countries (WFP, 2015c). The organisation's focus is on emergency relief and assisting people through specific feeding programmes, such as schools meals projects, which reached 18.6 million children in 2013. Its work does not significantly impact on that of FAO but is instead complementary to it.

IFAD was established in 1977 as one of the outcomes of the World Food Conference in 1974. Its aim is to finance agricultural development projects primarily for food production in developing countries. By February 2015 it had mobilised approximately US$ 23.4 billion in co-financing and funding from

domestic sources for rural development in addition to its own contribution of US$ 16.3 billion in loans and grants; it had supported 974 programmes and projects in partnership with 122 recipient governments and empowered 438 million people to grow more food, better manage their land and gain new skills. IFAD aims to transform agriculture and rural communities through practical projects with much of its work focussed on smallholder farmers. (IFAD, 2015)

FAO is operating in a crowded arena with many different IOs concerned with some aspect of food and agriculture. WFP and IFAD are the principle agencies working alongside FAO but with these as well as the other organisations FAO aims to form partnerships. This will prove more difficult with some than others depending on the other organisations' remit membership and political aims. Nevertheless FAO is still the only specialised agency in food and agriculture with a mandate to operate in all areas.

NGOs and Foundations

There are a range of non-state actors operating in food and agriculture, from development NGOs such as Oxfam and Save the Children, to philanthropic foundations, including the Bill and Melinda Gates Foundation and the Rockefeller Foundation. Many of these organisations have greater financial resources and more staff than FAO but do not have the global mandate.

Foundations have been operating in the realm of food and agriculture for decades. Some have been involved in international development for many years

and others have only recently been established. Many of their aims and objectives are very similar, based on improving lives, ending hunger and helping people adapt to climate change, however some have additional economic, social or political objectives too. For example the Rockefeller Foundation (2015) launched its Mexican Agriculture Programme (MAP) in 1943, through which it helped develop hybrid crops that were the founding crops in the 'green revolution' of the late 1960s.

This drive to create high-yielding crops was not only based on the foundation's desire to "guarantee humane benefits" but also instrumental in the fight against communism. Warren Weaver, the foundation's Natural Sciences Director in 1951, saw the work in Mexico as "the world's principal refuge from Communism" and argued that "in this struggle for the minds of men, the side that best helps satisfy man's primary needs for food, clothing and shelter is likely to win." (Weaver quoted in Rockefeller, 2015). In 1984 the Rockefeller Foundation launched its International Programme in Rice Biotechnology, which reinvigorated the foundation's support of biological research. The foundation has funded research into the mapping of the rice genome, which has led to the engineering of 'golden rice' a genetically modified hybrid that contains beta-carotene, which the body coverts to vitamin A (Rockefeller, 2015).

The promotion of 'green revolution' technology is seen in the work of a number of foundations, including the world's largest, the Bill and Melinda Gates

Foundation (2015a), which is also supporting the development of ‘golden rice’ as it aims to help farmers increase their productivity with the use of ‘heartier seeds’. With a foundation trust endowment of US$ 41.3 billion and total grant payments of US$ 34.5 billion since its creation in 2000 the Bill and Melinda Gates Foundation (2015b) is a significant force within international development. It has taken the ethos of the ‘green revolution’ of the 1960s to 1980s and is now promoting its expansion to Africa through the Alliance for a Green Revolution in Africa (AGRA) to which it has so far given funding totalling US$ 264.5 million.

This level of funding is significant and in many cases overshadows official development aid and the total resource base of international organisations such as FAO, which has an annual budget of US$ 2.4 billion for 2014-2015. (FAO, 2015) These foundations aim to improve the lives of small-scale farmers; however the benefits of these types of genetically modified seeds have yet to be ascertained; their predecessors used in the first ‘green revolution’ were not a success. As discussed in chapter one these technological fixes were highly reliant on industrialised methods, requiring more fertilizers, pesticides and water, which made them expensive and environmentally unsustainable.

Research has shown that the technological solutions employed in the ‘green revolution’ in India from the 1960s onwards had serious negative consequences. Although yields improved in the first few years of production by

the 1980s the soils were exhausted and infertile from the overuse of chemical fertilizers. Farmers trying to compete with highly subsidised US wheat made available through liberalised markets were forced into debt as crops failed, the price for wheat fell and the price of inputs, such as modified seeds, fertilizers and pesticides rose. This situation became intolerable for many farmers. In India over 100,000 farmers have taken their own lives since 1997; on average between 1997 and 2005 one farmer committed suicide every 32 minutes. (UNDESA, 2008)

Agricultural areas throughout India were affected, including Punjab. Vandana Shiva (1991, p.18) argues that “instead of abundance, Punjab has been left with diseased soils, pest-infested crops, waterlogged deserts and indebted and discontented farmers.” Despite the problems associated with the ‘green revolution’ solutions and the failure of the experiment Shiva (1991, p.12) states “the green revolution miracle continues to be advertised on every platform of every agency that stood to gain from it, the Rockefeller and Ford Foundations, the World Bank, the seed and chemical multinationals, the Government of India and the various agencies it controls.” Since Shiva’s initial research into the consequences of the ‘green revolution’ the Gates Foundation has been created and is now also promoting the same types of technological solutions for Africa.

Michael Edwards (2008) has also questioned approach of foundations to solving social problems with market-based solutions. He argues (2008, p.2) that with

their significant resources they are able to extend access to useful goods and services but these are “insufficient to lever deeper changes in the distribution of power and resources across the world” as this type of “systemic change involves social movement, politics and the state, which these experiments generally ignore.” The reluctance of these foundations to promote systemic change is unsurprising as their wealth is derived from and dependent upon the maintenance of the status quo and the market-based economy.

Foundations have significant resources at their disposal and they do work to improve the lives of millions of people. However, by taking a market-led approach to research and development and by promoting industrial agricultural methods, such as genetically modified seeds, they are operating within the neoliberal model.

In addition to the many large and well-financed foundations there are also thousands of NGOs operating in the food and agriculture arena. Many are small and work at the local level, directly with small-scale farmers to help improve food security for families and communities. Others are global entities that not only work at the local level but also operate globally to secure funds, commission independent research, campaign on issues and lobby governments for policy change. For example, Oxfam International has commissioned many reports (Murphy et al, 2012; Sahan and Mikhail, 2012) on issues relating to food security and development as well as initiating its Grow Campaign.

NGOs may be seen as offering a third route to development, an alternative to the state-led and market-led approaches. Wagona Makoba (2002,) argues “The prevalence of weak states and declining markets in the Third World inevitably leave development-oriented NGOs as the only alternative to promote grassroots development.”

There are so many different types and sizes of NGOs in the food and agricultural sector making this group of organisations incredibly diverse and complex. The ability of FAO to work in partnership with foundations and NGOs will depend on the willingness and capacity of each different organisation to do so. This is a complicated area which is beyond the scope of this thesis.

Multinational Corporations

Multinational corporations that sell seed, fertilizers, pesticides, as well as foodstuffs have significant resources and power within the marketplace. Industrialised agriculture has helped create vast wealth for these companies, often at the expense of small-scale farmers, but there is little known about their operations. Some of the largest companies are completely or partially privately owned, such as French company Louis Dreyfus, and Cargill, which has been controlled by the same two families for over 150 years. (Murphy et al, 2012)

There are four big commodity traders operating in the agricultural sector, Archer Daniels Midland (ADM), Bunge, Cargill and Louis Dreyfus. These are known as

the ABCDs. They dominate the market and are central to the modern food and agriculture system. All four were founded more than a century ago; the youngest of this group, ADM was established in 1902 and the oldest, Bunge, dates back to 1818. All are global operators with two (Cargill and ADM) US companies; Louis Dreyfus is a primarily family-owned French conglomerate with 20 percent of its shares held by employees; and Bunge, founded in Amsterdam has recently moved its headquarters to the US. (ADM, 2015; Bunge, 2015; Louis Dreyfus, 2015; Murphy et al, 2012)

ADM has 33,000 employees and serves 140 countries. It is the third largest processor of oil seed, corn, wheat and cocoa. In 2011 it had net sales of US$ 80.7 billion and it's been listed on the New York Stock Exchange since 1925. Bunge is the largest grain trader in South America. It had net sales of US$ 58.7 billion in 2011, employs 35,000 worldwide, operates in 40 countries and has approximately 400 facilities. Louis Dreyfus is active in more than 100 countries, its net sales in 2009 were US$ 34 billion and it is the world's leading manufacturer in cotton and rice and one of the largest producers of orange juice, producing 15 percent of the world's total. (ADM, 2015; Bunge, 2015; Louis Dreyfus, 2015; Murphy et al, 2012) Cargill is the largest ABCD and also the largest privately owned company in the US; owned by the same two families since it was founded in 1865. It has 153,000 employees worldwide and operates in 67 countries. It had sales and revenues of US$119.5 billion in 2011. (Cargill, 2015; Murphy et all, 2012).

Combined these four companies control a significant proportion of a range of basic commodities. For example they control 90 percent of the global grain trade. These companies do not just trade in physical commodities; they operate at every level from the farm to processing, acting as landowners, providers of seed, fertilizers and agrochemicals, as well as buyers of the end products, which they transport on their own fleets of ships. They have also expanded their operations into biofuel production and as well as providing financial services in commodity markets; two global developments that had a direct impact on the global food price crises in 2007-2008 and 2010-2011, as previously discussed. Jeremy Hobbs, Executive Director of Oxfam, (quoted in Murphy et al, 2012, p.3) argues that "Traders have been integral to the transformation of food production into a complex, globalised and financialised business. Food prices, access to scarce resources like land and water, climate change and food security are all affected by the activities of traders."

This control is exerted in many different ways. With their dominance in the market they influence what is grown, how, in what quantities and for which markets. With links to agro-chemical companies, for example Cargill with Monsanto and ADM with Syngenta, they promote particular technology packages and they also set the purchase price for commodities. However, although they are influential they do not operate in a vacuum and they are not the only large companies now operating in the global market. Japanese trading

firms Mitsubishi and Marubeni, new comer to the agri-business scene Glencore, Singapore-based Olam, and Bangkok-based Charoen Pokphand Group, are all making their presence felt.

These commodity traders are not the only multinational corporations operating in the food and agricultural sectors using their size and market penetration to exert influence. Chemicals companies such as Monsanto and Ciba-Geigy have moved their operations into agricultural biotechnology and pharmaceuticals. There are six major seed and agrochemical companies, Syngenta, Bayer, BASF, Dow, Monsanto and DuPont, which control 59.8 percent of seeds and 76.1 percent of agrochemicals. The share of the global proprietary seed market for the top three largest firms (Monsanto, DuPont and Syngenta) has increased from 22 percent in 1996 to 53.4 percent in 2011. The three largest agrochemical companies (Syngenta, Bayer and BASF) gained control of 52.5 percent of the market up from 33 percent in 1996. Between them these six companies accounted for 98 percent of all biotech acres. (ETC Group, 213)

These companies have a comprehensive hold of the inputs for industrial and genetically engineered agriculture and the farmers employing these methods, as promoted through industrial agriculture. However, there are millions of small-scale farmers in developing countries that are not tied into the corporate seed chain; instead they obtain their seeds from the informal sector, through saving their own seeds and exchanging seeds with their neighbours. It is through these

informal exchanges that many of the problems associated with genetically engineered seed, such as the growth of glyphosate-resistant weeds and the yield-reducing tendencies exhibited by transgenic hybrids, can be avoided (ETC, 2013). Issues surrounding genetically engineered seeds are complex and contentious. (Guardian, 2015) However, this discussion is also beyond the remit of this thesis.

In addition to the ABCDs and the large seed and agrochemical companies there are a number of food processors, such as Nestle and Unilever, as well as the final distributors, the supermarkets, including Tesco, Carrefour and Wal-Mart, which now exert influence in every continent and use their superior purchasing power to write their own terms. According to Fortune 500 (2015) Wal-Mart is the largest company in the world with a market value of over US$ 265 billion and profits of US$ 16 billion.

At every stage these large multinational corporations control the market, especially food produced through industrial agriculture. Although the private sector is invited to participate in negotiations taking place in fora including the CFS of FAO these companies all too often operate outside these arenas. They do not enter into debates on issues that may be affected by their actions and products, such as food security, price volatility, climate change, land use or water pollution. Instead they operate a business as usual approach and fight

any attempt to curb their control (Organic Consumers Association, 2015; Guardian, 2015).

Farmers

In addition to all these large organisations are the farmers themselves. As discussed in chapter one, farmers operate at many different levels from the small-scale farmer in a developing country to a producer on a very large scale using mechanised and industrial methods.

Farming differs from state to state and within states. According to Lowder et al (2014) there are at least 570 million farms worldwide, of which more than 500 million can be considered family farms. Most of the world's farms are very small with more than 475 million farms less than two hectares. However, a large in number these small farms only operate small share of the world's farmland. This farmland is not evenly distributed. Lowder et al (2014, p.ii) argue that "Farmland distribution would seem quite unequal at the global level, but it is less so in low- and lower-middle-income countries as well as in some regional groups." Of the 570 million farms 74 percent are located in East Asia, and the Pacific and South Asia, with China alone accounting for 35 percent and India 24 percent of the world's total. The remaining regions have considerably fewer farms for example of the total 570 million farms nine percent are in sub-Saharan Africa, seven percent in Europe and Central Asia, three percent in the Middle East and North Africa and four percent in Latin America. There are four percent of all farms in

high income countries, which include those in the EU, United States, Canada and Australia. (Lowder et al, 2014)

According to the US Department of Agriculture (2014) the number of farms has decreased from 2,204,792 farms in 2007 to 2,109,363 in 2012 but the average size of the farms has increased from 418 acres to 435 acres in the same period. From 2007 to 2012 the market value of all agricultural products has increased by 33 percent to US$ 395; this includes crop sales, which have increased 48 percent and livestock sales up 19 percent. However, it has to be noted that these increases in market value have taken place over the food price crises of 2007-2008 and 2010-2011.

In the EU over 47 percent of the land is farm land with 12 million full-time farmers working in the sector, on farms that average 15 hectares. There is range of farming methods used, including intensive, conventional and organic farming, especially with the inclusion of new member states from Central and Eastern Europe. (Europa, 2015a)

Farmers are the essential component in any food production process and as such they must have a voice at the global level. To better protect their interests in a system designed and operated by those who promote industrial agriculture small-scale farmers have joined forces; the largest of these farmers' organisations is La Via Campesina, which represents 200 million small and

medium scale farmers. (WDM, 2012) FAO is in a position to allow these voices to be heard, along with those of member states and the other organisations involved in food and agriculture. With the creation of La Via Campesina the voices of the small-scale farmers, who feed the majority of the world's population, can also now be heard. This recent development will be examined in more detail in chapter eight.

Loss of faith in FAO

The FAO may have had laudable intentions but during the first decade of the twenty-first century it drew criticism from many quarters. In 2002 it held the World Food Summit; Five Years Later to assess the progress on the MDG to address hunger. Progress had been slow with only a three percent decrease in the number of hungry people to approximately 815 million. Coupled with this the failure to propose any new legally-binding measures meant the summit was seen by many as a waste of time (Pearce, 2002; Mulvany, 2002).

Its official declaration, *The International Alliance Against Hunger*, (FAO, 2002a) was rejected by many NGOs and social movements. In fact, Patrick Mulvany (2002, p2) argued it "restates the same old recipe now spiked with biotechnology and with pious words about how governments must deal with the 'lack of political will' to solve hunger."

Civil society and farmers' organisations were particularly angered by the political direction and tone of the summit, especially when the meeting had come only

five weeks after a NATO-Russia meeting, also in Rome, which had agreed to sustain the US$ 800 billion a year global armaments industry. The dominant US-led ideology was seen as having a negative impact on FAO and its agenda, with the inclusion of biotechnology in the final declaration. The NGOs rejected the declaration and said it was "not 'lack of political will' but 'too much political will' to establish a global hegemony for trade liberation, industrial agriculture, genetic engineering and military dominance that are the main causes of hunger." (Mulvany, 2002, p.2)

FAO continued to garner criticism (Blaustein, 2005) as it explored the potential of biotechnology to combat hunger in its 2004 *State of Food and Agriculture: 2003-2004 Agricultural Biotechnology: meeting the needs of the poor?* (FAO, 2004b) In response to this controversial report 650 organisations sent an open letter to FAO accusing it of breaking it commitment to civil society and peasants' organisations and calling into question FAO's independence and its intellectual integrity (La Via Campesina, 2004).

This was followed by widespread criticisms of FAO at the 32nd session of the Committee on World Food Security (CFS) in October 2006. The global organisation representing peasant and small-scale famers, La Via Campesina, called for an end to the neoliberal agenda in the FAO and a move towards Food Sovereignty (Saragih, 2006).

To address the widespread criticisms the first-ever Independent External Evaluation (IEE) of FAO was undertaken. This evaluation and the extensive reform that followed will be discussed in the next chapter.

Conclusion

Since the World Food Conference in 1974 the world has become more globalised and the food and agriculture arena more fragmented, with many more actors operating within it. Neoliberalism and industrial agriculture have been promoted, creating new challenges for the food system and exacerbating those already present. (Weis, 2007; Murphy, 2013; De Schutter, 2014) Different groups want FAO to play different roles, for example the small-scale farmers represented by La Via Campesina would like FAO to offer an alternative to the neoliberal agenda promoted by developed countries, especially the US and EU through the WTO, the foundations and multinational corporations. (Mulvany, 2002; La Via Campesina, 2004; Saragih, 2006)

As a result of these competing pressures and the difficulties of operating in an increasingly complex global system attempting to tackle some the world's most challenging and contentious issues, with decreasing levels of support from its member states, FAO has struggled to meet anyone's expectations. (La Via Campesina, 2004; Blaustein, 2005) Facing criticisms for its lack of direction FAO instigated the most comprehensive reform in its history to enable it to face the challenges of the twenty-first century with renewed confidence. This will be examined in the next chapter.

Chapter Six:
Reform of FAO

Introduction

The research for this thesis was conducted during a transitional period in FAO's history. The need for reform had become urgent as the organisation struggled to fulfil its mandate with its budget and staff levels in decline, the enormity and complexity of the challenges to food security increasing and member states failing to reach consensus in their decision-making because of high levels of distrust. In 2004 the FAO Council agreed to launch an Independent External Evaluation (IEE) to strengthen and improve the organisation (FAO, 2004a). The FAO Conference in November 2005 agreed to initiate the evaluation and established the Council Committee for the Independent External Evaluation of FAO (CC-IEE) (FAO, 2005a).

At the FAO Conference in November 2005 the director general, Jacques Diouf, also put forward proposals for reform. Member states noted that the director general had "emphasised that reforms were necessary and urgent and should be implemented regardless of the budget level" and they agreed with his "assessment of the need to enhance the organisation's ability to fulfil its mandate through its normative and operational activities." (FAO, 2005a, p.17) These reform proposals were in addition to the IEE and members reiterated their expectation that both reform processes should be mutually supportive.

The IEE was the first ever independent external evaluation of the FAO. During its investigation the IEE team (2007, p.181) found that there were many inter-related reasons for the organisation's inability to fulfil its role, including mistrust between different groups of member states and also between member states and FAO's governing bodies, which led to reductions in resources, especially from the larger donors of the OECD states, which in turn affected the organisation's ability to fulfil its role thus fuelling more mistrust.

> *The split between the OECD and G77 members on substantive and political (ideological) grounds and the distrust between some of the membership and management are major factors rendering governing bodies ineffective, limiting their capacity for substantive discussion, constraining their ability to decide on major issues and programmes and preventing them from taking consensual decisions on priorities.*

With so many complex challenges facing the organisation, many of which were rooted in so many different ideological perspectives, the evaluation had to be thorough and fair to ensure all stakeholders accepted its findings and engaged with its recommendations. Fortunately the IEE process and final report were accepted across the board as it delivered an honest appraisal: its investigation was extensive, its findings challenging and its recommendations far-reaching. FAO fully engaged with the reform process, implementing profound changes, which are still on-going. At the time that the interviews were conducted in June

2013 at FAO headquarters in Rome the new director general, Jose Graziano da Silva, was just about to present his programme for change to the FAO Conference. The interviews reflect a sense of uncertainty, of change but overall a sense of optimism.

This chapter will examine the role of the IEE, its findings and recommendations, and then how these were implemented through the reform process, through the implementation of the renewed global goals and the new strategic objectives. The reform process has not been straightforward with concerns expressed in the UK Government's multilateral aid review, and strain placed on budgets and human resources, however there has been some progress in breaking down the silos within FAO's organisational structure. These issues will also be discussed.

Independent External Evaluation

Findings

The IEE, a fully independent team of six, led by Leif E. Christoffersen, delivered its report after 18 months of detailed investigation at FAO's Rome headquarters and its field operations across the world. The IEE team assessed FAO's overall performance but also had a mandate to help shape the organisation of the future so it would be in a strong position to "cost-effectively support humanity in facing the challenges of this 21st century, in particular the continuing scourges of hunger and poverty and the growing challenges to our fragile environment." (IEE, 2007, p.2) To allow it to do this the team's report covered four key areas: FAO's role in the multilateral system, which it acknowledged as very different to

that in which it was created; its technical work and the relevance and effectiveness of its normative and co-operative programmes; FAO's management, administration and organisation in all areas; and the global governance of food and agriculture and governance of the work of the FAO Secretariat.

The IEE report found that there was much that FAO did well but the organisation was in a state of decline, which would continue if renewal and reform was not undertaken as a matter of urgency. To do this FAO needed additional resources for a process the report described as Reform with Growth. It described FAO as "in financial and programme crisis that imperils the organisation's future in delivering essential services to the world." (IEE, 2007, p.3) This was not surprising as the IEE team found that between 1994 and 2005 FAO's total financial resources had declined in real terms by 31% and its total staff complement fell by 25%. However, the team argued (IEE, 2007, p.3) that:

> *If FAO were to disappear tomorrow, much of it would need to be re-invented but with much more precise priorities and a concentration of its efforts in areas of demonstrable need which correspond to its comparative advantage. The challenge is to move forward on reform with growth before further decline inflicts irreversible damage on the organisation.*

The IEE report outlined the essential goods, some of which are GPGs, and services, which it argued no other organisation was able to provide, but which it

also argued were at serious risk if FAO was not reformed and given adequate finances to complete the reform process. The report found that the organisation's efforts were fragmented and, rather than taking a broader view of the whole, it concentrated on small components of its vast challenge. This had undermined confidence in its abilities, which had then contributed to a continuing reduction in its financial resources, resulting in further declining capacity which had placed many of its core competencies in peril. It was in a spiral of decline, which if not addressed the IEE believed would place the organisation itself in danger.

As discussed in previous chapters, it is clear that the global food situation has shifted dramatically since the organisation was created. The world's population has increased from 2.5 billion in 1950 to 7 billion today with an estimated 2 billion more to be added by 2050 (United States Census Bureau, 2012; United Nations, 2014). In an attempt to address the food shortages of World War Two FAO's main focus was the increase in food production; this has been successful: since 1945 food production has tripled and the average food availability per person has risen by 40 percent (Da Silva, 2015). At the aggregate level this means that there is enough food for everyone in the world today; however this supply side success has not been transferred to those who need it the most. In addition to this distribution problem, production is also now growing more slowly and will be inadequate to meet the demands of a growing population, as well as changed consumer patterns that will inevitably follow from

income growth, such as higher demand for livestock products and higher value crops. These challenges are in addition to the strain placed on the world's resources through an increased need for energy and water, and problems associated with climate change and increased urbanisation.

The IEE argued that FAO needs to address simultaneously the issues of food production, livelihoods, income and food access. It called for the organisation to be more flexible and overcome its aversion to risk-taking, as well as change the way in which it is organised and the way it works. The IEE highlighted problems with the FAO's "heavy and costly bureaucracy", which "creates and reinforces a rigid, risk-averse and centralised organisational culture, with weak horizontal communication and linkages." (IEE, 2007, p.3) This was particularly relevant to the relationships between the organisation's headquarters in Rome and its field operations, which were described as "fragmented". It argued that the overall governance by its member states was failing the FAO.

Recommendations

The IEE made over 100 recommendations to enable reform with growth. It called for the organisation to form, adopt and implement a three to four year plan and suggested that this Immediate Action Plan should be "aimed at securing the future of FAO as the dynamic, credible and effective global organisation that its original architects intended." It saw FAO as in a strong position to tackle the "continuously emerging challenges that only a global organisation with the mandate and experience of FAO can address with

legitimacy and authority. (IEE, 2007, p.4-5) However it warned that “without transformational reforms, FAO’s current trajectory will prove unsustainable financially, strategically and programmatically.” (IEE, 2007, p.5)

Four main areas were addressed in the IEE’s recommendations: establishing a new strategic framework, investing in governance, enabling institutional cultural change with reform of the administrative and management systems, and restructuring for effectiveness and efficiency in both the headquarters and the field operations. The IEE argued that if these changes were successfully implemented “FAO would have set the new standard of excellence in multilateral organisations.” (IEE, 2007, p.5) FAO has an opportunity to move from a position of near irrelevancy through reduced capabilities to that of a trailblazer in reform.

Process of Reform

Taking the recommendations of the IEE as a point of reference FAO entered a period of reassessment and reform. Initially FAO established the Conference Committee on Follow-up to the Independent External Evaluation (CoC-IEE, 2008a) chaired by Mohammad Saeid Noori-Naeini. The committee reiterated the three global goals of FAO, to be discussed below, and outlined eleven strategic goals and eight core functions. These would be streamlined as part of the reform process. A root and branch review of the management of the organisation was also undertaken to help inform the process. (Ernst and Young,

2009) Although this was a start it was perceived by some[26] to be lacking the commitment to the fundamental reform recommended by the IEE and required to ensure FAO would be fit for purpose.

The appointment of the new director general Jose Graziano da Silva in January 2012 was a significant step in driving the reform process forward. Following an in-depth analysis of the management, administration and organisation of FAO the new director general went before the 38th session of the FAO Conference in June 2013 with his *Reviewed Strategic Framework* (FAO, 2013d) and *Medium Term Plan 2014-17 and Programme of Work and Budget 2014-15* (FAO, 2013a) for consideration.

Global Goals

The Reviewed Strategic Framework outlined an amendment to the FAO's Global Goals, which had been agreed by Conference in 2009. Instead of merely attempting to 'reduce' hunger FAO would now strive to 'eliminate' it. This aim was synonymous with those of the champions of nutrition, who established FAO seven decades earlier and which now set the tone for the whole reform process.

The change was endorsed by the FAO Conference. FAO's three Global Goals are now the:

[26] Some interviewees expressed their support for the streamlined Strategic Objectives and the new drive for reform instigated by the arrival of the new director general Jose Graziano da Silva, Rome, 2013

- Eradication of hunger, food insecurity and malnutrition, progressively ensuring a world in which people at all times have sufficient and nutritious food that meets all their dietary needs and food preferences for an active and healthy life;
- Elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods;
- Sustainable management and utilization of natural resource, including land, water, air, climate and genetic resources for the benefit of present and future generations. (FAO, 2013d, p.6)

The three Global Goals are extensive and ambitious; they also include a number of GPGs in their trans-boundary and trans-generational reach, including the sustainable management of natural resources for this and future generations. These goals cannot be achieved by FAO alone, as the director general argued in a statement to Wageningen University (2013, p.1): “In the fight against hunger and malnutrition, partnerships are absolutely essential. No single government, international agency or university can do it alone. Each one of us has a different contribution to give.” Partnerships have always played an important role in FAO’s work but will be even more important in the future.

Strategic Objectives

As a result of the Strategic Thinking Process instigated by the new director general five cross-cutting Strategic Objectives were established following

several rounds of negotiation. These have been created to assist FAO, with its partners, in striving to achieve its ambitious global goals. The five Strategic Objectives are to:

- Contribute to the eradication of hunger, food insecurity and malnutrition
- Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner
- Reduce rural poverty
- Enable more inclusive and efficient agriculture and food systems at local, national and international levels
- Increase the resilience of livelihoods to threats and crises. (FAO, 2013d)

The proposals set out in the strategic framework were put before the 38th Session of the FAO Conference, which welcomed the cross-cutting nature of the five Strategic Objectives, which members argued would "enable the organisation to better work in a multidisciplinary and integrated manner." (FAO, 2013b)

The Sixth Objective

A sixth objective, focused on technical knowledge, quality and service, was also welcomed by FAO's member states, which they argued was important for the organisation's ability to provide GPGs. (FAO, 2013b) The Reviewed Strategic Framework argues that the sixth objective is of paramount importance "in an increasingly decentralised context" and should be seen as an instrument to build

up the capacity of FAO's mainstream key technical functions and to protect the quality and integrity of its technical and normative work, the data it produces and analyses and the quality of its services. It argues this is essential "to ensure a robust and practical results-based approach to all of the work of the organisation." (FAO, 2013d, p25)

Through the sixth objective there will be renewed focus on the provision of GPGs, which are recognised by the director general, staff and member states as integral to the organisation. By protecting the quality and integrity of its normative work and the data it produces and analyses FAO will be ensuring the continuing provision of GPGs and its own reputation as a valued international organisation and trusted partner.

In addition to the 'five plus one' strategic objectives, two cross-cutting themes of gender and governance were also identified to operate across all objectives. As means of action for the organisation seven core functions have also been highlighted, through:

- Normative work and standard setting instruments
- Data and information
- Policy dialogue
- Capacity development
- Uptake of knowledge and technologies
- Facilitating partnerships

- Advocacy and communications.

The six strategic objectives as well as the seven core functions are all very closely related to the provision of GPGs, many of which are pure GPGs, and which also come under the three main roles of the organisation. Establishing this strategic framework has been central to the reform of FAO. The director general stated that since his appointment he had been involved in "a wide and inclusive initiative to modernise and transform the organisation" with the ultimate aim "to improve the delivery and impact of FAO's programmes by effective translation of our normative work into country-level impact and of our global knowledge products into tangible change in policy and practice." (FAO, 2013d, p.2)

UK Government's Multilateral Aid Review

The IEE had not been the only critic of FAO's performance. In 2011 the UK government conducted a Multilateral Aid Review (MAR) of FAO as part of a larger review to assess the value for money for UK taxpayers delivered by multilateral organisations. This review was conducted under the UK's Coalition Government as part of its austerity drive.

The UK Government, through the Department for International Development provided £87 million to FAO in 2013-14, 44 percent of which was assessed core funding. (DFID, 2014) The UK government's contributions to FAO are not high, especially when compared to the UK's defence budget, which despite an eight

percent cut in real terms introduced as part of the 2010 Spending Review was still in excess of £33 billion each year from 2011 to 2015[27] (UK Government, 2010).

The MAR (UK Government, 2011, p.1) recognised the value that FAO brought to the sphere of food and agriculture as "a unique source of knowledge and information, gathering, analysing and disseminating data that aid development" and through its normative and standard setting work, its ability to provide a neutral forum for member states to negotiate international treaties, agreements and guidelines and then its assistance to member states for implementation. It also acknowledged its work in the area of food safety, quality and facilitation of trade, and in dealing with cross border issues such as avian influenza and the implementation of a successful decades' long global campaign for the eradication of rinderpest (UK Government, 2011; FAO, 2011a).[28]

Despite the provision of these many GPGs the MAR also found that FAO offered poor value for money for UK aid. The UK government's assessment highlighted a number of weaknesses in FAO's organisation and operations especially its lack of focus on results, particularly at a country level;

[27] The Spending Review 2010 (UK Government, 2010) outlined proposals for defence spending to be £33.8 billion in the financial year 2011-12; £34.4 billion in 2012-13; £34.1 billion in 2013-14 and £3.5 billion in 2014-15.

[28] In 2011 rinderpest, a deadly cattle virus that has killed millions of cows, buffalo and other animals causing hunger and economic hardship in Africa, Asia and Europe, became one of only a few diseases to be officially eradicated. This success has been the result of the hard work of FAO and its partners across the world. (FAO, 2011a)

organisational strengths; financial resources management; core and value consciousness; and transparency and accountability.

With the scale of reform required the UK government was uncertain as to the likelihood of FAO's ability to enact positive change. The MAR argued that strong leadership would be required to oversee the full implementation of the existing reform package; if successfully completed it would turn FAO into a much more efficient and effective organisation. However, its prognosis was not optimistic: "The current likelihood of full, successful implementation with the necessary urgency is low." (UK Government, 2011, p.6) It should be noted that this assessment was made in March 2011, before the appointment of the new director general, who started in his role at the head of the organisation the following January.

In an update of the MAR in 2013 the UK government recognised that there had been overall progress on a number of issues as FAO had "introduced greater prioritisation and more focus on results through streamlined strategic objectives and new frameworks at country and corporate levels." (UK Government, 2013, p.1) It also recognised improvements in the recruitment processes and performance management but highlighted the fact that human resource reform remained a priority. It found a similar improved situation in the organisation's transparency and accountability, which had been deemed 'unsatisfactory' in the original MAR in 2011.

Budgets under Pressure

As part of its reform with growth FAO has been expected to implement fundamental and transformational change at the same time as responding to its member states' concerns not only in relation to FAO's perceived lack of 'value for money' but also the volatile global financial situation. In addition to these concerns it also has to contend with cash flow challenges due to delayed payments of assessed contributions, which account for approximately 41 percent of its overall budget; unplanned expenditures; and the uncertainty over the amount and timing of voluntary contributions, which account for the remaining 59 percent of its budget. (Pasquini, 2013c; IEE, 2007)

One of FAO's largest donors is the EU, which contributes significant amounts to the organisation. EU funding includes investment in specific projects, including €3.5 billion over the next seven years on agriculture-related programmes, €400 million of which will be spent on nutrition-specific projects (Pasquini, 2013d). The EU has high expectations of FAO wanting it to be a champion on nutrition and resilience, an important regulatory and policy agency, as well as having expertise on epidemics, efficient agriculture, development of new technologies and all in a sustainable manner.

Laurence Argimon-Pistre, head of the EU delegation to Rome, was critical of FAO's budget and argued that the EU wanted all UN agencies to have zero nominal growth. However, she also voiced support for the director general in a

press interview given in July 2013 following the 38th FAO Conference. “Our countries are going through crisis and very difficult times in terms of budget. We may be rigorous and strict in the definition of budgetary constraints, [but] we feel that the [FAO] director general is a doing a great job.” (Argimon-Pistre quoted in an interview, Pasquini, 2013d).

FAO member states may have recognised the important role played by the organisation, the progress made in the reform process and their support for the work already done by the new director general but they did not fully support his budget. At the 38th FAO Conference in June 2013 member states found consensus on a 2.2 percent budget increase, but this was conditional on increased efficiency gains and savings. This set the organisation’s 2014-15 budget to just over US$1.028 billion; a figure approximately US$22.6 million lower than that which the director general had proposed in his budget. This was in addition to the US$14 million of efficiency gains and savings already outlined in his original budget, which meant FAO had to find a total US$36.6 million in savings (Pasquini, 2013a).

Human Resources under Pressure

Efficiencies have been a driving force for member states, which may have expressed their support for the director general’s vision for FAO but reiterated their own position and “in the prevailing global economic and financial climate, stressed the need to fully implement the proposed Programme of Work in the most cost effective manner possible” (FAO, 2013b, p17, emphasis in the

original). Member states also, whilst recognising the level of efficiency gains and savings already achieved during 2012-13 nevertheless wanted further efficiency gains to be made, particularly in relation to staffing related costs. Members agreed to FAO conducting a strategic workforce planning exercise and job audit, with reports delivered to the organisation's Finance Committee.

The IEE (2007, p.3) had highlighted the significant issues arising from the "heavy and costly bureaucracy" but also acknowledged the problems that had resulted from the substantial reductions in staff numbers, which it argued had imperilled the organisation's ability to fulfil its primary functions. A different approach to the organisation's human resources management was required rather than widespread staff reductions.

Despite the EU's calls for budget restraint Argimon-Pistre recognised the need for adequate staffing in FAO, a human resources organisation that is dependent on the expertise of its people. She argued: "You have to keep strong expertise also at the headquarters. It is very difficult to balance...because the resources here at the headquarters are limited. If you put too many people on the ground you may actually lose the basis here in terms of expertise." (Quoted in Pasquini, 2013 c, p.3) Creating a strategy that addresses the concerns of member states whilst enabling the organisation to move forward is a challenge and the process has not been without its critics.

The overall review and reform of human resources management started with the creation of the Human Resources Strategic Framework and Action Plan (FAO, 2012a) in response to the recommendations of the IEE and accelerated with the appointment of the new director general. These reforms are the first of their kind in the organisation's history. The Finance Committee receives progress reports on the implementation of the strategic framework and action plan every six months.

The aim of the strategic framework and action plan is to govern "the organisation's human resources management programme in a coherent and integrated manner as well as align its workforce capabilities to support effectively the delivery of corporate strategic objectives." (FAO, 2012a, p.2) These have included the introduction of an overall human resources strategy, organisational design, performance management and staff and career development.

One of the main aims of the reform process was to decentralise the organisation and to help create a more flexible and versatile workforce with a greater understanding of FAO's different areas of work. To this end the strategic framework (FAO, 2012a, p.9) set out initiatives to "develop a managed mobility programme which would comprise both functional and geographical rotation of staff."

By November 2014 a Performance Evaluation and Management System (PEMS) review had been conducted and recommendations had been fed into a revised performance management policy framework, a Competency Framework had been introduced at the start of 2014, a revised recruitment process had been put in place, and generic job profiles were being introduced to increase efficiency of human resources management (FAO, 2014a). FAO has also agreed a framework with its sister organisations, IFAD and WFP, for collaboration on recruitment, selection and appointment of general service staff for the headquarters for the Rome-based agencies.

However the way in which changes are being made has aggrieved staff and caused increasing tensions between FAO management and staff. It was estimated that 75 percent of the efficiency gains would have to be made through the rationalisation of FAO's staff. Unions balloted members on support for strike action in October 2013 in response to the news that a possible 56 full-time positions would have to go, in addition to the loss of the IT department. (Pasquini, 2013a) Members of staff were also concerned about the lack of information, consultation and transparency and the move towards having fewer permanent staff and more consultants (Pasquini, 2013b).

Tensions have continued and following a breakdown in relations between management and staff strike action was taken in March 2015 (The Italian Insider, 2015; AP in FAO, 2015; CCISUA, 2015). It had been scheduled to last

three days but extended to a fourth day. The professional workers' staff association the AP in FAO (Association of Professionals in FAO) held an Extraordinary Assembly to discuss the situation. It noted with "deep concern: The lack of willingness of Senior Management of FAO to conduct consultation in good faith"; "The repeated unilateral introduction of piecemeal measures and changes to policies affecting the conditions of employment and work"; "The absence of any coherent human resources policy aimed at encouraging, acknowledging and rewarding good performance of staff" (AP in FAO, 2015) as well as concerns over the treatment of elected officers of the union.

Denis Aitken, assistant director general for corporate services, human resources and finance and architect of the human resources reform process, defended the changes in an interview with Devex in March 2015. He defended the 55-month cap on short-term contract renewability as an effort to reduce "the number of staff that are working in the organisation who have not gone through a full competition process for the position" (Pasquini, 2015). He argued that having temporary staff for eight or ten years "is not good management practice." In addition, he argued that the opening up of general service vacancies to external candidates would increase the organisation's credibility among donors and contributors. He also highlighted the achievements in the acceleration of the recruitment process from an average of between nine and ten months to fill a position to just five months.

Another area of disagreement between staff and senior management has been the introduction of staff performance evaluation. The AP in FAO called for the postponement of “the introduction of the proposed new Performance Evaluation and Management System until further meaningful consultations are held with the Staff Representative Bodies” (AP in FAO, 2015). Notwithstanding the differences of opinion on when and how changes are implemented an overhaul of the evaluation process is required. The IEE (2007, p.327) had found that 24% of FAO staff had had no appraisal at all and when implemented “the use is erratic, it is not enforced systematically and division directors and above have generally been exempt from any form of performance appraisal.” Devex (2015) found that evaluations had previously not been critical with 95 percent of staff members receiving ‘high marks’ in their assessments because managers were reluctant to criticise.

The way forward on all these issues needs to be found to enable the organisation to proceed with its reforms. FAO needs to have the right members of staff in the right places to be able to achieve its objectives, both in the field delivering technical projects and in headquarters supporting field operations, as well as in the provision of GPGs. Staff and the senior managers need to build a relationship based on mutual respect and confidence, through open communication and a shared vision for the organisation.

Breaking down the Silos

The way in which the reforms are being implemented may have been criticised, especially their impact on human resources management, as discussed previously, however positive changes have also been recognised.

> *As part of the restructuring we are now talking to each other; breaking down the silos. For example, sustainable agriculture is an issue across the board, and there needs to be discussion between divisions and departments. That's what the new objectives are all about. There is complexity in both the problems and the solutions. There are the country responses to problems but there also needs to be an international response.*[29]

The removal of 'the silos' has been seen by many[30] as one of the main advantages of the reform process, especially considering the breadth of the issues tackled by FAO. The IEE (2007) had highlighted the problems faced by the organisation, which had become fragmented in its approach to the many challenges it faced rather than taking a broader view of the whole. Before the reform each division concentrated on one specific area of work and did not interact with other divisions in a cohesive way; overall FAO had lost sight of its main global objectives.

[29] Personal interview with Erwin Northoff, FAO news coordinator, June 2013, Rome
[30] As highlighted in personal interviews conducted at FAO, Rome, June 2013

However, the breadth of the work undertaken by FAO and the expertise it has gained through continued work in many different areas for decades is not a weakness but one of its main strengths. It is hoped that the introduction of the Strategic Objectives, as cross-cutting governance tools, will allow FAO to draw on this knowledge base and deliver a service not available through any other organisation operating in this arena.

> *The complexity of the issues in our domain, such as biofuels, gender and price volatility, means that FAO is the place to come to address all of these issues. We are knocking down the walls, doing a lot more multi-disciplinary work. We have to provide integrated solutions. We can do that and no-one else can.*[31]

Re-engagement with its global goals and establishing refined strategic objectives with cross cutting themes allows for discussions to take place across the organisation to address challenges that require co-ordinated action from a number of divisions. Budgets will now reflect this change in emphasis with funds allocated according to the objectives, linked to outputs, and managed by objective co-ordinators, rather than through departments and divisions.[32]

Through this root and branch reform process and with the introduction of the Strategic Objectives, there is a hope and expectation that the silos will be

[31] Personal interview with Michael Clark, FAO Special Advisor on International Governance, June 2013, Rome
[32] Personal interview with Olaf Thieme, Livestock Development Officer FAO, June 2013, Rome

transformed and the governance structure of FAO strengthened.[33] If successful these new governance systems will add value to FAO and assist it in the provision of GPGs. However, it may take years to see the true impact of the changes being implemented.

Conclusion

At the turn of the century FAO was finding it increasingly difficult to fulfil its mandate as its budgets and staffing levels were systematically reduced through budgets cuts and restricted cash flow. Added to these practical problems the organisation also faced more complex global challenges to food security making the work of the organisation more critical but also more difficult. FAO was expected to respond to these challenges whilst combating mistrust between different groups of its member states and its own governing bodies, which in turn had resulted in reduced financial support.

The IEE had the task of investigating this complicated situation, which it did in its extensive review. Finding FAO in a state of decline, from which it may have suffered irreversible damage if left unchecked, the IEE has hopefully been able to steer the organisation in the direction of renew through its recommendations for reform with growth. By addressing the heavy and costly bureaucracy, concentrating its efforts on the areas in which it has comparative advantage and

[33] Personal interview with Richard Trenchard, Senior Advisor, Office of the Deputy Director-General (Operations) FAO, June 2013, Rome

breaking down the silos the organisation will be in a better position to meet the challenges of the twenty-first century.

The IEE acknowledged the important role that FAO plays in the arena of food and agriculture and its provision of GPGs. It noted that the organisation would have to be created if it did not already exist as there is a requirement for a global organisation with the mandate and experience of FAO to tackle the present and emerging challenges. However the organisation is not without its faults and it cannot fulfil its mandate without transformational change. If successful, FAO could move from a position of near irrelevancy to one of trailblazer, leading the way in organisational reform.

Through the appointment of Jose Graziano da Silva as director general and the implementation of the strategic plan, with its five plus one strategic objectives, two cross-cutting themes and seven core functions, as well as its reformed human resources, FAO should be able to overcome many of its bureaucratic issues and respond to its many critics, including the UK government. However, if many of the developed countries, such as the UK and others within the OECD were hoping for an organisation that would unquestioningly support their neoliberal market driven agenda they may well be disappointed. FAO may be seeking to work with all partners, all its member states as well as non-state entities including the private sector, but its strengthened global goals are ideologically opposed to the neoliberal agenda and instead deeply rooted in the

common cause of humanity through the provision of GPGs, such as the sustainable management of natural resources for this and future generations; far from the market approach to development. Its role in the provision of GPGs will be addressed in the following chapters.

Chapter Seven:
FAO and the Provision of GPGs:
The Power of Measurement

Introduction

Many of the different organisations in the UN produce a range of pure GPGs, such as statistics and publications, and FAO is no exception. FAO is ideally placed as a specialised agency of the UN with a mandate and global reach. For example it is able to produce statistics that are relevant to its areas of mandate, including but not confined to, food security, natural resources and food production. There are no other organisations able to produce this information on this scale and so FAO, even in just this one area, is fulfilling an important function.

In the next three chapters there will be an examination of the main areas in which FAO provides GPGs and an assessment of its ability to do so in the future. This is particularly relevant now as the organisation undergoes its most rigorous and radical reform in its 70 year history in an attempt to recreate itself for the challenges of the 21st century.

As FAO works in so many different ways it is not possible to give a detailed account of each area of its work in this thesis. In addition to this limitation some of its operations, such as technical assistance to member countries, do not qualify as GPGs as they are not global or trans-boundary in their scope.

However, even the GPGs it does provide are too numerous to review here and so a selection of GPGs will be examined in relation to the three main roles of FAO: measurement, through data collection, analysis and dissemination; convening, bringing together its member states and a wide range of actors to debate issues and form agreements; and its normative function in setting norms and standards. This chapter will discuss the role that FAO plays in the provision of statistics and publications, chapter eight will discuss the organisation's role as a convener, and chapter nine will address norms and standards settings.

These three main roles have been chosen as they exemplify the GPG work of the organisation; they have been at the core of FAO's work since it was established in 1945 and will always form part of its remit. FAO's technical work, although important, does not qualify as a GPG, whereas measurement, convening and its norm setting are not only vital to the work of the organisation but are also GPGs. These three main roles also allow for analysis using the four interlinked themes of regime theory highlighted in chapter three.

Examples of the range of GPGs provided by FAO through its three main roles will be examined taking into consideration the different dimensions of GPG provision, their non-rivalrous, non-excludable, trans-boundary or global nature as well as acting across generations, as discussed in chapter two. In addition, the four interlinked themes of regimes and international organisations highlighted in chapter three, namely the identity of the main actors, level of

autonomy enjoyed by regimes and international organisations, the interdependence of states and other actors and the level of importance granted to information and the communities that provide it will inform the analysis of the GPGs provided by FAO.

Three roles of FAO in the provision of Global Public Goods

In its provision of GPGs FAO operates through its three main roles; by measurement with the creation and then analysis of statistics, by bringing together a range of actors as part of its convening role, and norm and standard setting; all three operate across the divisions. The complexity and integrated nature of the issues addressed means that the organisation's responses have to be multifaceted and multi-disciplinary.

Not only does there have to be communication, co-ordination and co-operation between the different divisions and departments but this also has to take place between FAO's three main roles. The statistics produced are used by individual member states as they implement programmes to tackle all aspects of food insecurity. These statistics, in the form of reports, also play a vital role in informing the discussions during international conferences and in the creation of treaties, guidelines and international standards. Without reliable, objective data informed decisions cannot be made. In addition, through its ability to bring a range of actors into negotiations and using its expertise in the areas under its

remit it is able to act as an informed facilitator. It is in this nexus that there is a dynamic relationship between the three main roles of the organisation.

The Power of Measurement

Through measurement it is possible to gauge the extent of a problem, whether that is the number of hungry people of the extent of environment damage in a particular region or associated with a type of agriculture. This greater understanding is the first step to finding a solution to any problem. However, with so many different actors, all with different agendas, using these measurements, their reliability and trustworthiness is vital.

Statistics

FAO measures the many different aspects of food security, food production and the many cross cutting themes, such as poverty, gender, climate change and land tenure, as discussed in chapter one. In so doing it produces the statistics that enable informed policy decision-making both at the national and international levels.

Annual reports, such as the State of Food Insecurity (SOFI), play an important part in the regular output of FAO, as do issue-specific reports that highlight an area that needs in-depth analysis. The gathering and then analysis of data is one of the purest forms of GPG that any UN specialised agency provides.

It has been one of the primary functions of FAO since its creation in 1945. At the very first FAO Conference in Quebec the importance of statistics was highlighted. The Report of the Conference (FAO, 1945) stated:

> *If FAO is to carry out its work successfully it will need to know where and why hunger and malnutrition exist, what forms they take, and how widespread they are. Such data will serve as a basis for making plans, determining the efficacy of measures used, and measuring progress from time to time.*

The provision of statistics was seen as part of its advisory role. Its founders, in particular Boyd Orr, although recognising the urgent need for good statistical data also wanted FAO to be a regulatory organisation as discussed in chapter four. Its remit to provide information has never been questioned; however, its ability to continue to do so has.

Reform of Statistics at FAO

The IEE (2007, p.152) also recognised its importance. “This is a pure public goods function in the strict sense of the term and there are not significant alternative sources of supply… For the least developed countries (LDCs), such data underpins fundamental analysis of policy options for use in policy support.” The IEE argued that this data was vital, as “Information on food supply, food insecurity and vulnerability is fundamental to LDCs in ensuring adequate food to their populations.”

The IEE highlighted the role played by the organisation's information systems and publications, which enable FAO to aggregate, analyse and disseminate knowledge and which underpin FAO's technical co-operation, work on treaties and agreements as well as policy and technical meetings.

Despite its relevance as a core function, its value to LDCs in particular and its role as a pure public good, basic statistical work has received steadily less emphasis in FAO's regular budget, with land resources and land use found to be a particularly neglected area. The IEE recommended a total re-examination of the provision of statistics, with an emphasis on the needs of the users.

Acting upon the IEE's recommendation the FAO Programme Committee mandated the establishment of the Independent Evaluation of FAO's Role and Work in Statistics, which delivered its report to the committee in 2008. The Evaluation Team (2008) found that FAO's mandate to provide agricultural statistics was as valid as ever, although the working environment had changed considerably. Provision within FAO and at a country level had deteriorated as a result of lack of donor interest in agricultural statistics. Interviewees also cited this lack of political will to tackle food insecurity as a significant challenge for FAO in general.[34]

[34] As highlighted in personal interviews conducted at FAO, June 2013, Rome

The team (2008, p.13) also found that despite the provision of data in these areas by different organisations, such as universities, industry, private entities and national governments "[N]one, however, provide global statistics in such a wide range of areas as FAO." In addition to the heavy use of the organisation's databases by FAO itself to produce analysis, publications and projections "FAO's global statistics are quoted continuously and used externally in global analysis by academics, research institutions and governments. They are also used extensively by the private sector." (Evaluation Team, 2008, p.13) This use by such a wide range of actors demonstrates the level of trust placed in them. Even in the UK Government's MAR (2011, p.1) FAO was recognised as "a unique source of knowledge and information, gathering, analysing and disseminating data to aid development." However the quality of the statistics received from member states was more problematic.

During the 1990s there had been a dramatic reduction in ODA (Official Development Assistance) and FAO funding, most notably on maintaining national capabilities. In fact, the Evaluation Team found that this decline, especially in Africa, had resulted in a situation in which the "official data submissions from countries in Africa are at their lowest level since before 1961, with only one in four African countries reporting basic crop production data." (Evaluation Team, 2008, p.7) Without this data member states are not equipped to make informed policy decisions nationally or as a member of the international

community. It also has consequences for the quality of data found in FAO's global statistical system.

Within FAO itself, against a backdrop of declining resources and technical capabilities, the units providing agriculture, forestry and fisheries statistics had to deal with emerging demands for quality data and additional analyses. Despite this increase in demand the system was being deprived of sufficient funds. Between the funding periods of 1994-95 and 2006-07 statistics' percentage of FAO's net appropriations had gone from 6.7 percent to 4.5 percent. (Evaluation Team, 2008)

The high expectations placed upon FAO by a wide range of users, declining funds to provide reliable data, through limited national capabilities and reduced budgets within FAO itself, as well as the ever increasing data requirements in the expanding and inter-connected food and agriculture areas have placed significant strain on the organisation's ability to provide reliable and timely statistics. The team's overall conclusion was that "FAO's basic statistics programme is crumbling." (Evaluation Team, 2008, p.8)

To remedy this situation the Evaluation Team made several recommendations. It suggested: improving national statistical capacity, the creation of synergy and balance between FAO and its member states to help improve the quality of country submissions, the creation and implementation of a corporate quality

framework to put in place principles of good practice, ensuring a user-orientated approach to integration of the statistical system, as well as elevating the visibility of FAO statistics in the international arena. Strong leadership of the programme would be required and so the team (2008, p.10) also recommended the organisation "establish the position of Chief Statistician for FAO with a mandate to lead all of the FAO Statistical System into the 21st Century."

New Purpose and Vision: Statistics Reformed

Taking the report of the Evaluation Team FAO has implemented a number of its recommendations, including the creation of the position of Chief Statistician and the establishment of an Inter-Departmental Working Group on Statistics. FAO's Chief Statistician is Pietro Gennari and his role is to manage the overall governance and coordination of the FAO statistical system. He is also responsible for the quality and integrity of the technical and normative work of the organisation, which is closely related to the sixth objective. Acting upon the recommendations of the Evaluation Team FAO has now established a decentralised statistical system involving 17 divisions in eight departments, and with five regional statisticians who provide dedicated support to member countries. Output covers all sectors related to food and agriculture: crops, livestock, forestry, fisheries, natural resources (land and water), agri-business, food security and nutrition. These activities cover five key functions: data collection, processing and dissemination; monitoring and analysis; norms and standards; capacity development and statistics coordination (FAO, 2014c).

The first step in finding a solution for a problem is to understand the problem. The recently reformed Statistics Division of FAO “serves as the foremost authoritative source of standards and methods as well as timely and reliable data on hunger, food and agriculture” (FAO Statistics Division, 2015b). To allow it to fulfil this vision and its mission to “advance statistics on food and nutrition security, sustainable agriculture and rural development at national and international levels” the division works to “develop, implement and promote international statistical standards, methods and tools in collecting, analysing and disseminating data.”

Partnerships are essential to the division. It works directly with member states to help them develop their own national statistical strategies and strengthen their institutional and technical capabilities. This helps to improve statistical systems to allow for better design and monitoring of policies and programmes. With stronger capabilities on the ground this will also improve the quality of data available for global analyses, for FAO programmes and those delivered through partnerships with other organisations, at the national, regional and international level.

The division’s budget has been increased from appropriations of US$ 11,507,000 in the Programme of Work and Budget 2008-09 (FAO, 2007) to a projected total of US$ 23,881,000 in the Programme of Work and Budget for 2014-15 (FAO, 2013a). Although this is a significant increase in the division’s

budget it did start from a low base. It also has to fund, not only the basic core functions of the division but also its reform, member states' capacity building and an increasing demand for statistics over a wide series of indicators, as argued by Josef Schmidhuber, Deputy Director of the Statistics Division.

> *The growing need to cover an ever increasing set of data with a rather stagnant amount of resources is posing a major challenge to the division. There's a wider range of domains, across economics, climate change, global and regional, as well as agri-environmental indicators, such as land, water, fertilizer and pesticide use and a lot more datasets and indicators in the pipeline. In parallel, we try to strengthen the capacity of developing countries to produce more accurate agricultural statistics and do so more timely and more frequently.*[35]

Provision of Statistics

The Statistics Division produces publications, working papers and statistical yearbooks that cover food security, prices, production and trade as well as agri-environmental statistics. One of its main activities is maintaining the corporate statistical database, FAOSTAT. This is time series statistical information compiled, processed and stored by country from 1961, which includes data from 245 countries and territories covering information on agriculture (production,

[35] Personal interview with Josef Schmidhuber, Deputy Director, Statistics Division, Economic and Social Development Department, FAO, June 2013, Rome.

consumption, trade, prices and resources), as well as nutrition, fisheries, forestry, food aid, land use and population. It is currently the largest and most comprehensive statistical database on food and agriculture in the world. (FAO Statistics Division, 2015a)

As part of its commitment to improve the provision of statistics and to assist its member states develop their capacity the division has initiated the Global Strategy to improve agricultural and rural statistics. This enhanced capacity will enable member states to produce basic data and information that can then help guide the decision-making process, both at the national level, as well as then also being available at the international level.

In addition to these areas of work the division is working in partnership with other organisations and member states in providing the Agricultural Market Information System (AMIS), which was established at the request of Agricultural Ministers of the G20 in 2011. This is an inter-agency platform created to enhance food market transparency to help co-ordinate policy action in response to market uncertainty. (AMIS, 2015a) AMIS is at the pilot stage.

> *Alongside the usual reports we are also working on AMIS. FAO is playing a big role and hosts it here. There's a small budget available to the division for capacity development*

> *in AMIS. We are rolling this out in AMIS countries with a pilot scheme in Kenya and some provinces of India.*[36]

AMIS, when completely operational, may prove to be a revolutionary tool for farmers around the world. By using a smart phone, connected to GPS and using a free app farmers will be able to access market price data.

> *The idea simply is to create a real-time, geo-referenced price monitoring system for agricultural prices, ideally with global coverage. All you'll need is a smart phone and the app will be free. If people can key in the price, of wheat for example, and where the market is, then we can visualise it on a map and it will go live globally. Everyone will be able to access the information. It will all go on a price monitoring database. With food security monitoring we'll be able to see how quickly prices are transmitted, such as a shock at the international level to local levels.*[37]

Although Josef Schmidhuber has high expectations of AMIS and its potentially revolutionary role in alleviating food insecurity by connecting individual farmers through more co-ordinated market information the initiative has not made the progress its instigators, the Agricultural Ministers of the G20, had hoped. In its most recent progress report (2015b, p.2) it was found that "data transfers from participating countries remained insufficient. Only five countries honoured their

[36] Personal interview with Josef Schmidhuber
[37] Personal interview with Josef Schmidhuber

commitment to send monthly forecasts for all the elements of their crop balances." AMIS continues to rely on existing information sources, including that of FAO.

This lack of participation may be the result of a lack of capacity at the national level, which would be unsurprising given the findings of the IEE (2007) and the Evaluation Team (2008) as previously discussed. Capacity building at all levels is vital for the production of reliable and timely data. At FAO the importance of this data provision needs to be emphasised.

> *Everyone wants better data but how much will people invest in obtaining better data? We need to increase the value of our data to our users. We have a clearly defined role in this process as a knowledge organisation that can provide widely accepted and recognised standards and methodologies.*[38]

Ensuring people recognise of the value of FAO's statistical work is essential to making sure it receives adequate funding.

Publications

FAO produces a wide range of publications that cover every aspect of food and agriculture within its remit, with either a global reach or regional focus. Its publications, many of which have been published regularly for decades giving an objective view of emerging issues and challenges, provide an unrivalled

[38] Personal interview with Josef Schmidhuber

overview of many aspects of the food system. Designed to promote understanding, inform debate and form the starting point for decision-making processes FAO's publications play a key role in the organisation's provision of GPGs.

Using the data supplied FAO produces a range of publications, including its flagship State of Food and Agriculture (SOFA) reports, which have been produced annually since 1947, and its State of Food Insecurity (SOFI) reports, which were instigated by the World Food Summit in 1996. The IEE (2007) concluded such publications offer value-for-money with costs for SOFA reports varying from US$ 900,000 to US$ 1,400,000 to produce. The SOFI cost approximately US$ 300,000. This compares favourably with similar publications produced at the same time, such as the World Bank Development Report (2006), at US$ 3.6 million, and the Global Economic Prospects (2005) at US$ 931,000.

The IEE (2007, p.82) found that these flagship reports and the "numerous specialised publications contribute to FAO's image as a 'serious and credible organisation'. In addition, their range and depth meant they were important reference and policy documents used to place critical issues on the international agenda and to help facilitate debate, as advocacy tools for governments, opinion-makers and the general public.

It is this gravitas, due in part to the rigorous analysis and scientific scrutiny to which the reports have been subjected, which allows the reports to "present overall argumentation for conclusions which may be controversial." (IEE, 2007, p.81) This has been demonstrated by FAO's role in examining the implications of trade policy; a politically sensitive area. The IEE (2007, p.81) argued that the organisation needs to continue to take these types of risks "on behalf of its poorest members, even when this impinges on the interests of some of its largest contributors, but it must always be grounded in intellectual rigour and in-depth analysis of implications."

The production of publications, using the data gathered by the Statistics Division, is a crucial role for FAO and although Boyd Orr wanted the organisation to have additional regulatory capabilities, the ability to put difficult issues on the agenda is the essential starting point for any political discussion. It also aids FAO in its normative role.

Changing Formats Add Reach for Publications

With the advent of the internet the format in which FAO disseminates its information has been forced to change. In 1997 FAO's technical department produced 5,516 publications including translations and reprints; by 2004-5 this had fallen to just 3,228; a 41 percent reduction. (IEE, 2007) During this time the organisation's website had expanded dramatically to become the largest website in the UN system, and one of the most visited. However, this large website was difficult to navigate. Taking the comments of the IEE and as part of

the reform process work is being undertaken to address these issues, including the launch of a new website, using a more user-friendly format and refreshed content. Across all media branding plays a particularly important role, as highlighted by Nick Rubery of the Information Division.

> *Across all content we have to manage the branding of FAO. If there's any digression from the official logo, for example, that can have a negative impact; its position can be undermined and its authority eroded. FAO is operating in a crowded arena but we have lots of expertise so it's essential for us to defend our standing.*[39]

Protecting FAO's reputation is one issue to be addressed in this new digital era; the ways in which the information is accessed also brings challenges. There are an ever-expanding number of devices able to connect to the internet, from smartphones and tablets to laptops and desktops, all have different capabilities. The challenge is to make sure FAO's publications are accessible to all, whatever device is being used and in whichever part of the world.

> *Digital has changed the nature of my work, the packaging of it, the design and the delivery. It's a multi-media product now with the shift from analogue to digital. The book as a comprehensive format is still paramount but it's not necessarily printed now. There's an incredible growth in*

[39] Personal interview with Nick Rubery, Design and Information, Information Division, FAO, June 2013, Rome

the number of mobile devices being used, especially in Africa. It's a different world of consumption and we have to make sure we can publish across the different media. This makes delivery a complex challenge.[40]

The interests of the end-user, as well as the manner in which the information is accessed, also have to be taken into consideration. FAO publishes for a wide range of audiences, from global decision-makers and technical users, to members of the general public and farmers in the fields. Information on its website and through its many publications has to be readily available to all. Each different audience has particular requirements and should have their needs met. In its role as a GPG provider FAO needs to ensure the data it has gathered and analysed is disseminated effectively.

Statistics and Publications as Global Public Goods

There is no doubt that the provision of statistics is a GPG. It is also a pure GPG as a non-rivalrous resource, which does not diminish with use. As FAO's purpose is it disseminate this information as widely as possible, through its recently re-launched website, various publications and datasets, as well as at workshops, meetings and conferences, this provision is also non-excludable.

Although some of the data gathered is at a country level, it is used not only in the country of origin but also to inform decision-making at the regional and

[40] Personal interview with Nick Rubery

international level and is made available to a wider audience via FAO's website and publications. It informs the larger body of knowledge, which has been gathered and analysed since the establishment of FAO in 1945, and prior to that by those involved in the International Food Movement, as discussed in chapter four. It is undoubtedly trans-boundary and global. In addition, as this information is used to predict future trends and inform policy formation to address issues that will affect future generations, such as climate change and potential patterns of food insecurity, it also acts across the generations.

The GPG value of the data provided is recognised by the division, which states it provides "free and easy to access harmonised, reliable, timely and policy-relevant data and advocate for their use for evidence-based decision making." (FAO Statistics Division, 2015b) The provision of data is, and always has been, a core function of FAO. As a GPG it is one of the most important functions of the organisation, and one that should be recognised as such.

The Role of Statistics and Publications in FAO as an International Organisation

As GPGs FAO's provision of statistics and publications plays a vital role in extending the knowledge base in the area of food and agriculture. The way in which this provision is integrated into the international system through FAO as an international organisation will now be examined in relation to the four areas of regime theory discussed in chapter three. These are the identity of the main

actors, the level of autonomy of the international organisation, the interdependence of the actors and the level of importance granted to information and the epistemic communities that provide it.

Realists, neo-realists, liberals and neoliberals all perceive the state to be the main actor within the anarchic international system. State sovereignty is paramount but the ways in which states relate to and work with other entities within this system, including international organisations, is an area in which there is disagreement between these four main theories. Liberals and neoliberals believe that international organisations play a much greater role and that there is a significant level of interdependence. The constructivists and cognitivists concentrate their attention on the construction of norms and are therefore more concerned with the role of knowledge, the importance of intersubjectively shared meanings and the authority given to knowledge and the epistemic communities that provide it.

Although technical assistance to member states and the communities within states has not been addressed in this thesis, as it is not a GPG and therefore beyond the scope of this thesis, the role that statistics plays as the basis for project formation has to be acknowledged. This work transforms the lives of millions of people, creating more food secure communities and lifting people out of poverty through agricultural programmes and is a vital function of FAO. (FAO, 2015j)

FAO's member states play a number of roles in determining FAO's mandate and providing the funds to allow it to achieve its objectives. In the case of statistics and publications the member states are both the consumers of these goods, to inform their own national policies and their debates on international issues, and they are often the information providers. Member states that have limited capacity have found this aspect of their commitment problematic, an issue highlighted by both the IEE (2007) and the Evaluation Team (2008).

In order for FAO to accomplish anything it has to have the support of its member states; not all of them, all of the time, but the member states have to reach an agreement on the best way forward for the organisation and its budget. This is relevant for the whole organisation and each division and department within it.

The importance of the provision of statistics has been recognised by the IEE, the Evaluation Team, by FAO and its member states. This has ensured it plays a central role in the strategic objectives and has led to an increase in the division's budget. This increase may not have been as substantial as some believed was necessary[41] however it is an increase designed to fund the reform of the Statistics Division and the increased work load associated with capacity building. As discussed previously the overall increase in the budget has been modest as member states demanded more efficiency savings to be made

[41] Personal interview with Josef Schmidhuber

(Pasquini, 2013d) in addition to those already written into the director general's budget proposal (FAO, 2013a) for the reform of FAO.

Both evaluations recognised the need for capacity building for member states unable to produce statistics of sufficient quality. This is an on-going process which will take time to complete. As the AMIS progress report (2015) highlighted member states are still not yet providing statistics on a regular monthly basis, which may indicate that capacity is still inadequate.

The statistics and publications that are provided are used in a number of ways, within FAO, within member states, to inform international debate and to highlight the many issues of concern in the food and agriculture arena to the general public. As such these statistics and publications are used and cited by many different actors, from policy-makers at the national and international level, NGOs, CSOs, academic institutions, the private sector, farmers and concerned members of the public. This information also feeds into the UN system as a whole and adds to the broader knowledge base of the epistemic community. As such these groups can also be identified as main actors, as consumers of the information. Without an audience and purpose there would be no need for their provision.

FAO receives its mandate from its member states. The way in which it fulfils this mandate also has to be approved. This has been particularly important during

the organisation's reform process. The statistics division has received scrutiny through both evaluations and has reformed in accordance with their recommendations. It is now in a position to move forward.

It will continue to work with the main actors, the member states, and assist their participation in the gathering of statistical data and their consumption of it. In this way the division, as seen in the overall organisation, is always dependent on the member states and as the larger donors provide additional funds they will continue to monitor the value for money that they receive, as evidenced by the UK Government's MAR (2011).

Partnerships are essential to FAO. The challenges faced by the world in relation to food and agriculture are so far-reaching, interconnected and immense that only by working together can the international community achieve the eradication of hunger. As previously outlined the collection of data is a very interactive process and FAO relies on its member states for their cooperation.

However, FAO also has the expertise to allow it to establish the best methodologies for data gathering and analysis. Through seven decades of working in the arena of food and agriculture, working on the issues that have always been relevant, such as food production, and also charting emerging challenges, including the impact of climate change, FAO is in a better position than any other organisation to provide and analyse the relevant statistics.

Therefore, although there is a need for strong partnerships it has to be acknowledged FAO has unrivalled expertise in this area that should not be overlooked or diminished. It has a well earned reputation for objectivity, which it needs to protect and preserve. Despite its relatively small size and budget it is the main actor in the international system in the provision of statistics and publications on issues related to its mandate.

In relation to statistics and publications the level of importance granted to information and the communities that provide it is the most crucial of the four interlinked key themes of regime theory. FAO is the information generator and holds a central position within the epistemic community working within food and agriculture. It needs to defend its position as it is the only international organisation with an overall mandate to do so.

The provision of statistics and publications is important in putting issues on the agenda, informing policy and steering decision-makers. To enable FAO's statistics and publications to play this vital role they have to be trusted and accepted by the majority of the main actors, in particular the member states. Transparency, sound methodology, well defined objectives, which are linked to FAO's overall strategic objectives, and a thorough and scientific approach to the gathering and analysis of data, are all essential. In addition, FAO also has to have a clear idea of its position and role within the international system.

> *We have to position ourselves as trusted advisors to our member states; we have to help them steer; we have to be present and have gravitas. We cannot play the role of policy vending machines.*[42]

Through the gathering and dissemination process FAO is not only interacting with its member states and their agriculture ministers but also the wider epistemic community. It is engaging with research institutes, NGOs and CSOs, the private sector, as well as other international organisations with overlapping areas of interest. These connections are vital in achieving the overall aims of FAO, including the eradication of hunger.

Conclusion

The provision of statistics and publications is a pure GPG. It has always played a crucial role within FAO and placed the organisation at the forefront of the epistemic community. It has increased the level of understanding of issues related to food and agriculture, informed policy and driven technical assistance, which has improved the lives of millions. Through the reform of their provision, as with the wider reform of FAO, it is hoped that well-defined objectives, capacity development and an increased budget will enable the organisation and the division to continue to provide this GPG. FAO and its member states have to recognise the important role played by its statistics and publications as the organisation strives to achieve its global goals and the eradication of hunger. FAO's role in their provision and its well-earned reputation should be protected,

[42] Personal interview with Michael Clark

enhanced and celebrated. The following chapter will address the role of FAO as a convener.

Chapter Eight:
FAO and the Provision of GPGs:
The Role of Convener

Introduction

FAO has the mandate and authority to bring together, not only its member states to discuss issues under its remit, but also a wide range of non-state actors, which is expanding in the dynamic arena of food and agriculture, as discussed in chapter six. And by bringing together these different actors informed and advised by FAO's own knowledgeable experts within their own fields, as part of a wider epistemic community, agreement can be reached through negotiation and partnership building for international treaties, standard setting, the establishment of codes of conduct, voluntary guidelines and agreement on norms. FAO is then ideally placed to assist member states to implement these treaties, standards, codes and guidelines once agreed.

The work of the Committee on World Food Security (CFS) will be analysed closely, through observations that took place during the CFS meetings in 2011 and 2012, and an examination of voluntary guidelines produced. The CFS demonstrates many of the different ways in which FAO operates, as a facilitator, partner and provider of relevant information. The inclusion of non-state actors, most notably the Civil Society Organisations (CSOs) in the formally recognised Civil Society Mechanism (CSM), as well as NGOs, foundations and private sector organisations, is a key feature of the CFS. If these non-state actors are

formerly and genuinely accepted as valued partners by the member states the changes taking place in the CFS could pave the way for their inclusion in many other international fora, in FAO and beyond.

FAO has always acted as a convenor. From the first international meeting at Hot Springs at which the international community agreed to establish the organisation, FAO has always been able to bring together member states and other actors to discuss issues relating to food and agriculture. In the post-war world there was an urgency to their discussions, as many countries struggled to feed their populations. However, despite the continuing problems, with almost 800 million people still suffering from chronic hunger today (FAO, 2015a), the political will to tackle the issues in the twenty-first century is inadequate.

> *There is a lack of political will to reduce hunger. The hungry have no voice. International organisations need to work with countries to make sure there's enough food and people have access to it. Access is connected to poverty but although there have been achievements on poverty reduction the number of hungry people is still stubbornly high.*[43]

This lack of political will is not new, as discussed in previous chapters. There are many vested interests in maintaining the present system. As the international trade system has become more globalised and the planet's

[43] Personal interview with Erwin Northoff

ecosystem more fragile through overuse and the burden of an increasing population greater strain has been placed on food production. However, as discussed in chapter one, food production is only one small part of the problem, as access to adequate food is also vital to ensure food security. There are many reasons for the persistence of hunger.

> *There have been huge achievements, especially in India and China, but hunger is still there. There are many reasons for this; there are more disasters and civil wars, climate change is having an impact and natural resources are being degraded, as well as the spread of diseases such as Avian Influenza. With the expansion of international trade there are additional food security issues, as well as those linked to the inputs associated with more complex food chains.*[44]

Taking into consideration the complexity of the challenges faced and the array of different actors involved at every level of food production, supply and consumption, it should be obvious that states should not be the only actors involved in addressing these issues. Although FAO's mandate and funding come directly from its member states, and as such they are the main actors within the organisation, it is important that given the complexity of the challenges faced that FAO brings together all relevant parties. Working in partnership with different organisations has been recognised as the only way in

[44] Personal interview with Erwin Northoff

which progress will be made on these complex global issues, which is why the development of partnerships also plays an important role in FAO's new Strategic Objectives.

This serves a number of purposes; it ensures there is a breadth of perspectives represented, different sources of information accessible, and it acts as a motivator for member states, which may otherwise wish to sideline the organisation or ignore the issues. With different organisations, such as NGOs and CSOs, observing and in some cases participating in negotiations, it is more difficult for member states to act with impunity.

FAO hosts numerous international conferences on many different aspects of the work under its remit however this thesis will concentrate its attention on the Committee on World Food Security (CFS). The CFS has been selected because it has been in the vanguard of FAO's reform process and has allowed for an unprecedented level of participation. Following the publication of the IEE report this committee has been reformed and has led the way in creating an inclusive space for many different actors, most notably through the Civil Society Mechanism (CSM). This has broadened the committee's reach, its importance within FAO and established its role as a provider of GPGs. Its performance is

being closely monitored[45] as this model may be used elsewhere in FAO and by other organisations if successful.[46]

The Committee on World Food Security (CFS)

The food price crisis in 2008 placed food security firmly at the top of the international political agenda for the first time in decades. Unfortunately this attention arrived at a time when FAO had just received the IEE report and was beginning the process of self-examination in an attempt to reform. This introspection placed the organisation in a disadvantageous position, especially when faced with the possibility of increased competition from other organisations on matters within its remit.

As a response to the food price crisis the United Nations Secretary General, Ban Ki Moon, created the High Level Task Force on Global Food and Nutrition Security (HLTF) to promote a comprehensive and unified response to the crisis. This included the heads of the UN specialised agencies, FAO among them, the World Bank, International Monetary Fund (IMF), OECD and the World Trade Organisation (WTO). David Nabarro, Assistant Secretary General of the UN, was appointed the co-ordinator of the HLTF, which was supported by a small co-ordination secretariat hosted by IFAD in Rome. (HLTF, 2015) Its first role was to produce the Comprehensive Framework for Action (CFA), which was

[45] The reform of the CFS has been analysed in at least two PhD theses, by Josh Brem-Wilson (2011) and Jessica Duncan (2014)

[46] Personal interview with Thomas Price, Senior Officer, Agricultural Innovation and Society at the Global Forum on Agricultural Research (GFAR), based at FAO, June 2013, Rome

presented at the High Level Meeting on Food Security for All in Madrid in January 2009.

The High Level Meeting in Madrid (IISD, 2009) was attended by 62 ministers from more than 126 countries, as well as members of civil society, trade unions, the private sector, academia, donor agencies and international organisations, including FAO Director General Jacques Diouf. Progress since the High Level Conference on World Food Security in June 2008 (FAO, 2008b) was discussed, as was the need for a coordinated response to the crisis. The idea of creating a Global Partnership for Agriculture, Food Security and Nutrition was also put forward by the French President, Nicolas Sarkozy.

Although a co-ordinated response to the crisis was needed the Madrid meeting, promoting the HLTF and the Global Partnership proposal, highlighted the difference between two competing groups, each wanting overall control of the governance of food and agriculture (Duncan, 2015). The G8, G20 and the UN in New York were championing the HLTF to become the primary body to address the crisis and the Rome-based agencies were pushing for participatory processes and reform of the existing bodies, which would guarantee their relevance and long-term survival.

In response to the perceived threat of the proposed Global Partnership, which lacked substance, and the prospect of the creation of new financial

mechanisms, which would have taken control of this arena away from the Rome-based agencies, FAO's director general suggested an alternative. He argued that the CFS, a multi-agency organisation hosted at FAO, would be a suitable vehicle for a co-ordinated response to tackle the short-term food price crisis and through which to address the longer-term issues of food insecurity. To accomplish this, the committee would need to be reformed. Participants at the Madrid meeting agreed to give the CFS an opportunity to reform into a stronger inter-agency instrument.

The ETC Group (2009, p.1) argued that it was not so much the future of the CFS that was at stake but rather:

> *whether or not leadership on food and agriculture issues would remain within the UN system and among the Rome-based agencies – or, whether some undefined new partnership of public and private interests would take over and possibly move the focus from Rome to New York or Washington.*

The CFS had a limited opportunity to reform into an organisation that could deliver on these complex and emotive issues. Non-state actors, such as peasant farmers, would also have a chance to participate in a more profound way in a reformed CFS.

Reform of the CFS

The CFS had been established at the 18th Session of FAO Conference in 1975 (Res 21/75) acting upon recommendations from the World Food Conference in 1974. The actions of member states were to be monitored by the CFS to ensure adequate food was available for and accessible to everyone. By monitoring actions at the country level the committee would then be able to achieve a global perspective to be used to inform its recommendations for policy action to alleviate short-term problems and plan ahead to avoid their reoccurrence. As such it was created to offer global oversight. The CFS is an intergovernmental body, hosted by FAO and which includes WFP and IFAD. The committee reports annually to the Economic and Social Council of the UN (ECOSOC).

In recent years it had been tasked with producing guidelines on the Right to Food, as set out by the 1996 World Food Summit, which it did with CSO participation[47], and monitoring the progress being made towards the first MDG target on reducing hunger. However, its future usefulness had recently been questioned. The IEE (2007) found that the CFS had been dynamic in its monitoring role and was the committee which best involved civil society. Despite this praise the IEE concluded: “With the completion of discussions on the Right to Food it is now losing some of its momentum and questions have arisen as to whether it meets for too long and too frequently.” (IEE, 2007, p.178)

[47] Personal interview with Thomas Price

This weak performance had also been noted within FAO but instead of suggesting it meet less frequently member states agreed to embark on its reform, as championed by FAO's director general at the Madrid meeting. Eight months of deliberations between the CFS Bureau and an open Contact Group resulted in energetic negotiations, which included CSOs and other non-state actors, but no document to debate at the 35th session of CFS in October 2009.

In addition to this obstacle there was also disagreement between the member states as to the preferred format of the reformed CFS. OECD countries wanted to limit the level at which the CSOs could participate. They did not want CSOs able to enter negotiations on global issues. "Far from being an influential coordination body, most OECD states saw a reformed CFS as a 'forum' or, as one CSO suggested in the light of the OECD's reluctance to give the CFS a global overview, a 'small talk' forum." (ETC, 2009, p.2) This was not the stance taken by the G77 and China which wanted to "both think and act locally and globally."

Although the CFS is an intergovernmental body and not a committee of FAO the reactions of member states to the CFS were based on their perceptions of FAO, which had just started its own reform process, the outcome of which was not certain. The ETC Group's assessment of the situation was that opinions were divided. The group (2009, p.3) argued that the OECD countries distrusted FAO and "the last thing many countries want to do is give more power to FAO as it

struggles through its own reform process." However the G77 and China preferred FAO to IFAD and WFP as it operated a one-country one-vote system rather than a weighted voting system.

Despite these underlying tensions and different motivations there was also much co-operation between member states and non-state actors during this CFS meeting, which proved to be a landmark event. By its conclusion agreement had been reached on the future direction of the committee. It was agreed (CFS, 2009, p.2) that the CFS would remain an intergovernmental committee in FAO with the vision that:

> *as a central component of the evolving Global Partnership for Agriculture, Food Security and Nutrition will constitute the foremost inclusive international and intergovernmental platform for a broad range of committed stakeholders to work together in a coordinated manner and in support of country-led processes towards the elimination of hunger and ensuring food security and nutrition for all human beings.*

This vision statement placed it centrally in any future Global Partnership, a move designed not only to ensure the committee's central position but also to prevent any attempts to resurrect the Global Partnership in another guise outside the sphere of FAO and the other Rome-based organisations. It reiterated its global remit and also the importance of the broad participation of

different stakeholders that the CFS had developed through the Right to Food negotiations. The Right to Food concept was also embedded in the vision statement (CFS, 2009, p.2) which concluded: “The CFS will strive for a world free from hunger where countries implement the voluntary guidelines for the progressive realisation of the right to adequate food in the context of national food security.” Although other stakeholders were to be included in the negotiations the responsibility for a state’s population’s food security remained solely with the state.

Initially the roles of the CFS would be to coordinate at the global level, by providing a platform for discussion; policy convergence, through the development of international strategies and voluntary guidelines; and offer support and advice to countries and regions, in the development, implementation, monitoring and evaluation of their own plans to eliminate hunger. In the second phase of reform the committee would then take on additional roles, such as coordination at national and regional levels, promote accountability and share best practice at all levels and develop a Global Strategic Framework for Food Security and Nutrition. The first version of this living document was completed in 2012 (CFS, 2012a) and presented to the 39th session of CFS in October 2012. It was received warmly[48], due to its significance as the result of collaborative process and as a living and flexible document designed “to provide an overarching framework and a single

[48] Observations made by the author at the 39th Session of CFS, 2012, Rome.

reference document with practical guidance on core recommendations for food security and nutrition strategies." (CFS, 2012a, p5-6) This living document is now on its third version (CFS, 2014) with updates incorporated to include changing priorities.

The reformed CFS has a new structure designed to allow for input from all stakeholders at the global, regional and national levels. This comprises of the CFS Bureau and Advisory Group, Plenary, the High Level Panel of Experts (HLPE) and the Secretariat (CFS, 2015a).

The Bureau is the executive arm of the committee and consists of a chairperson and twelve member countries. The Advisory Group is made up of representatives from five different categories of CFS Participants: UN agencies and other UN bodies; civil society and NGOs particularly organisations representing small-scale food producers and disadvantaged groups[49]; international agricultural research institutions; international and regional financial institutes, such as the World Bank and the IMF; and private sector associations and philanthropic foundations. The Advisory Group is tasked with advancing the committee's objectives, ensuring continued linkages and two-way communication between the different stakeholders.

[49] These include smallholder family farmers, fisherfolk, herders, landless, urban poor, agricultural and food workers, women, youth, consumers and indigenous people (CFS, 2015a)

The Plenary is held annually over several days that incorporate World Food Day on 16 October. It is the “central body for decision-taking, debate, coordination, lesson-learning and convergence by all stakeholders at a global level on food security issues” (CFS, 2015a, p2). The CFS has a permanent Secretariat located at FAO, which includes members from WFP and IFAD. Its role is to support all sections of CFS.

A High Level Panel of Experts (HLPE) has also been introduced as part of the reform process. It has a Steering Committee that has internationally recognised experts in a variety of food security and nutrition-related fields. It also has a roster of experts that can be used to build specialised teams to work on specific areas. The HLPE has clear objectives to assess and analyse the current state of food security and nutrition and to provide scientific and knowledge-based analysis and advice on policy-relevant issues and identify emerging trends. (CFS, 2015b)

Since 2010 the CFS has made requests for 11 reports from the HLPE relating to issues surrounding food security and nutrition. These have been presented to the CFS meetings to inform debate and policy recommendations.

HLPE Report	Date Published	CFS Session
Price Volatility and Food Security	2011	CFS 37
Land Tenure and International Investments in Agriculture	2011	CFS 37
Climate Change and Food Security	2012	CFS 39
Social Protection and Food Security	2012	CFS 39
Biofuels and Food Security	2013	CFS 40
Investing in Smallholder Agriculture for Food Security	2013	CFS 40
The Role of Sustainable Fisheries and Aquaculture for Food Security and Nutrition	2014	CFS 41
Food Losses and Waste in the context of Sustainable Food Systems	2014	CFS 41
Water and Food Security	2015	CFS 42
Sustainable Agricultural Development for Food Security and Nutrition, including the Role of Livestock	Expected 2016	CFS 43
Sustainable Forestry for Food Security and Nutrition	Expected 2017	CFS 44

Table 1: Information sourced from (CFS, 2015b)

The reports produced by the HLPE are used to inform CFS debates and ensure the guidelines produced by the committee are based on scientific evidence and knowledge. Since its reformation the CFS has established a number of guidelines through inclusive negotiations, which will be examined in the next section on the role of norm and standard setting.

The CFS is no longer limited to an annual meeting. The reformed CFS has an on-going work programme implemented by the Bureau with inputs from the Advisory Group and the HLPE (CFS, 2010). The 39th session the CFS adopted

a multi-year programme of work (CFS, 2012c), which set out the committee's priorities for the forthcoming years.

Civil Society Mechanism

Prior to the reform of the CFS civil society organisations had started to participate in a small number of global negotiations on a few issues, such as the guidelines on the Right to Food as previously discussed, and at the climate change conferences in Rio in 1992 and 2012, and Johannesburg in 2002. However, despite the promising start to civil society inclusion in Rio member states have since become more sensitive to their presence and the process has become more closed.[50]

Despite the reluctance demonstrated in other global fora, and by some states in the CFS as discussed previously, during the CFS reform negotiations there emerged a growing consensus on the need to allow an unprecedented level of participation for CSOs, especially social movements and those representing people most affected by food security issues. A group of approximately twenty CSOs attended this important CFS meeting in 2009. According to the ETC Group they worked well together, participated actively in the plenary debate, had three representatives inside the open Contact Group and observers in the drafting committee. The ETC Group (2009, p.4) observed that: "Government delegations from all perspectives were impressed by CSO participation which was reserved and balanced."

[50] Personal interview with Thomas Price

This inclusion was formalised in the reform document, which stated: “Civil society organisations/NGOs and their networks will be invited to autonomously establish a global mechanism for food security and nutrition which will function as a facilitating body for CSO/NGOs consultation and participation in the CFS.” (CFS, 2009, p.5) The CFS intended this mechanism to “serve inter-sessional global, regional and national actions” with activities to include the “exchange of information, analysis and experience”, to develop “common positions as appropriate”, to communicate with CFS and to convene “a civil society forum as a preparatory event before CFS sessions if so decided by the civil society mechanism”. (CFS, 2009, p.5) The CFS invited the CSOs to submit a proposal on how these aims would be achieved and how the civil society mechanism (CSM) would be organised and function.

In response the newly formed CSM submitted its proposal to the next session of the CFS in October 2010. In the proposal the Declaration of the People’s Food Sovereignty Forum was reiterated, which stated civil society’s support of the CFS reform and emphasised the important role of civil society’s involvement in the process, which had been instrumental in “opening up a critical space which we intend to fully occupy...In so doing we will ensure that the voices of the excluded continue to be heard at the heart of food and agricultural policy-making and governance, at all levels.” (CFS, 2010, p.1) The proposals for CSM

participation in the CFS process outlined its role and functions, year-round activities and role in the plenary sessions, among other procedural items.

The CSM in now the largest international mechanism of CSOs working to influence policies and actions related to agriculture, food security and nutrition, on the national, regional and global level. The CSM reaches out to hundreds of CSOs on all continents, sharing information on global policy debates and processes and promoting consultations and dialogue. It is founded on the belief that the people most affected by food insecurity “are best placed to represent their own interests and views and are not only victims but also bearers of solutions.” (CSM, 2015)

The relationship between the CSM and member states has not always been straightforward but the complexity of the issues debated and the range of perspectives brought to the negotiating table from all stakeholders has to be recognised. This is not surprising considering the fact that the CSM is an inclusive and open space through which 900 NGOs and CSOs share information and participate in policy debates. (CSM, 2015b) However consensus is reached by the CSM on many issues. It also has to be recognised that member states themselves do not form a homogenous group and approach negotiations from a range of different perspectives.

The CSM has a number of ways in which it engages in the process, through its presence at the CFS, from the formal spaces in the round table sessions and plenary to participation in side events, through media work through to lobbying and creating alliances with member states. In 2011 CSOs dissatisfied with the lack of progress made on land grabbing also held a number of events to highlight this contentious issue.[51]

As part of the feedback process different sections of the CSM hold regular meetings, especially during and following the few days of the CFS annual meeting, to inform all participants of the on-going debates. In addition progress is monitored and follow-up points identified. For example, in 2011 meetings of the Concord European Food Security Working Group and the CSM-Western Europe (2011) gave their feedback on progress made on the voluntary guidelines for responsible tenure of land, the policy round tables on food price volatility, how to increase food security and smallholder-sensitive investment in agriculture and on gender, nutrition and food security, as well as the global strategic framework.

The two groups assessed the outcome of the 37th session of the CFS in two ways: by determining the degree to which the CFS was able to build its authority as the foremost global forum on food issues and the degree to which CSOs had

[51] In 2011 CSOs held a number of events, including public action, to denounce land grabbing and corporate investment. These actions were timed to coincide with the negotiations on the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. (CSOs, 2011b)

been able to use the CFS to advance their own positions. The two groups during their respective meetings (2011) came to the conclusion that the answer to the first question was positive as there had been a strong presence and active engagement and the answer to the second was more mixed given some member states' unwillingness to tackle the root causes of food price volatility. However, the groups recognised that there had been good progress made on shifting the terms of the debate on investment in agriculture away from that set out in the discussion paper, which was based on neoliberal market driven solutions in favour of corporate investment, public-private partnerships and global value chains, to language that recognised the primacy of small-scale sustainable food production and the value that small scale producers bring to the issue of food security as the major investors in agriculture.

In addition to participating in the debates on the different issues the CSM also plays an important role in ensuring the CFS is fulfilling its role. In this capacity it has raised concerns (CSM, 2014a) over the lack of progress on implementing a framework for monitoring CFS decisions and recommendations, which is one of the key functions of the CFS. The CSM criticised the CFS for not implementing its monitoring and accountability mandate, five years after the reform. In the 41st CFS session in October 2014 (CFS, 2014a) the CFS agreed a framework for monitoring its decisions that will include conducting baseline assessments of CFS effectiveness, opinion surveys of CFS stakeholders and implementation of in-depth country level assessments to be undertaken on a voluntary basis.

In a statement for FAO Regional Conferences (2014c) the CFS Chair, Gerda Verbung, also invited stakeholders to participate in a number of stocktaking events to foster more participation and to determine whether the policy recommendations and guidelines were being implemented and if so their effectiveness.

The formal participation of CSOs in the reformed CFS has been groundbreaking. Its implementation is being watched with great interest by international organisations and CSOs and NGOs operating in different arenas.

> *Some states were not sure about the inclusion of CSOs but now we have a process in place that allows for different voices to be heard. The director general wants to move FAO into becoming a multi-stakeholder operation. The CSOs are in now and international organisations are relying on all actors for mandate. I think the director general now feels that institutions can have CSOs involved more formally. The CFS could be a model for other committees.*[52]

As a multi-stakeholder model the CFS is leading the way. As participants in this experimental governance structure the CSM needs to ensure it not only fulfils its

[52] Personal interview with Thomas Price

own mandate but that the CFS continues to do so. The relationship between the CFS and the CSM is one that will be watched with interest.

Convening as a Global Public Good

Bringing different actors together to debate food and agriculture related issues has been one of FAO's main roles from the start. Over seven decades FAO has been the host and facilitator for hundreds of summits, conferences and workshops. Representatives from member states and non-state actors have been able to exchange viewpoints and information to foster shared understandings, which in turn helps to enable decision-making and policy formation to address some of the most important challenges facing the world. This has been at every level local, national, regional and global with many policies, especially those concerned with sustainability, aimed at creating a better world for future generations.

As such FAO in its general role as a convener is providing a GPG, by bringing many different actors together, as it attempts to be as inclusive as possible, to debate many trans-boundary and global issues that will impact upon this and future generations. As FAO also has a commitment to share best practice and the knowledge gained as a result of these meetings through many different media, including the internet, it can be argued that this role is non-excludable and non-rivalrous.

As the CFS has been the focus of this section of the thesis then it is the CFS that will be the main focus of the analysis both for its provision of GPGs and then in relation to the four main themes of regime theory. It has to be noted again that the CFS is not solely a committee of FAO but instead an intergovernmental entity. However, it has very close connections with FAO; hosted by FAO, championed by FAO and as a potential reform blueprint for committees within FAO. FAO is heavily involved in the reform and the work of the CFS and as such its provision of GPGs can be partially credited to FAO. In addition if FAO decides to adopt this multi-stakeholder model in other committees and bodies within FAO it is relevant to FAO's ability to provide GPGs in the future.

The participation of so many CSOs and NGOs through the CSM, with over 900 different organisations consulted and involved in the policy debates, has enabled the reformed CFS to become far more inclusive (CSM, 2015b). Within the CSM, the way in which information is shared, feedback provided and policy debated has created an inclusive mechanism for the CSM, which is beneficial to the CFS as a whole. This breadth of perspectives, especially taking into consideration the experiences of those most affected by food insecurity and small scale food production, informs the debates and also the policy formation. Although it is physically possible to exclude individuals and organisations from attending CFS meetings the way in which the CSM operates, in accordance with its mandate, allows for a broad range of views to be taken into consideration,

which then informs its position on each issue. The CSM mandate is closely related to that of the CFS, which also ensures that the CFS is a more inclusive space than any other committee operating at this level. In this respect the CFS is arguably non-excludable.

One of the main purposes of the CFS is to extend the global knowledge relevant to food security and nutrition issues; the information that is gathered is shared throughout the networks. This has created a non-rivalrous system, which fulfils the second GPG pre-requisite. Additionally, the issues that are addressed by the CFS are global issues that take into consideration this and future generations. In this respect, as in all others, the CFS undoubtedly provides GPSs.

With this level of participation and consensus building the policies that are eventually adopted should have a better chance of successful implementation as there is a broader range of actors that have voiced their support for them. However, as the framework for the monitoring of implementation is in the early stages it is too early to determine if this will be the case.

The Role of Convening in the FAO as an International Organisation

As an international organisation FAO has always played an important role as a convener. The CFS in its new role as a multi-stakeholder forum and through its close connections to FAO is in the vanguard of reforms that, if proved successful, may change the way in which FAO operates. This new approach to negotiations may also aid FAO in the implementation of its new Strategic Objectives, which require action at all levels of society, from farming communities to international fora.

In the CFS the member states are still the main actors. Only states can be members of the Bureau. However the level of participation granted to different entities in the Advisory Group gives this committee a much broader participatory approach to governance than any other body at this level. This approach has a number of implications.

Different voices can be heard, including those most affected by the issues debated. By engaging with every level of society, with a much wider breadth of knowledge and experience, there are greater opportunities of finding practical solutions to the many challenges. It also gives the CFS a far greater level of legitimacy if it has a mandate from the people affected as producers and

consumers and not just governments, some of which are not democracies and therefore do not even have a mandate from their own populations.

It can also be argued that if people have been engaged in the negotiation process they should also be more engaged in the implementation of the policies. This level of engagement should have a positive impact on the policies' overall success.

In addition, as different partners have been involved in the formation of policy and have an in-depth knowledge of how and why it was developed they are in a better position to judge whether it is being implemented correctly. The CSOs and NGOs that have been involved in the CFS are also involved in the communities, in which the implications of the policies can be felt most keenly. They are in a better position than any other organisations to monitor and evaluate the policies' performance, their success, or not. They are also in the best position to ensure member states do exactly what they have promised. If this approach works as expected it should act as an excellent motivator for member states that have to return to the CFS every year to explain their actions.

The CFS is an intergovernmental body that reports annually to ECOSOC; it is not a committee of FAO, WFP or IFAD. Nevertheless, it still has to fulfil its remit and justify its budget. This reform process has already elevated it from a committee that was under threat to an integral part of the international response

to food insecurity and if it is successful in achieving its aim (CFS, 2009, p.2) it will become “the foremost inclusive international and intergovernmental platform” to co-ordinate and support country-led processes to eliminate hunger.

As the CFS demonstrates its ability to deliver well-formed policies in a number of important areas under its remit and as the relationships between the different partners continue to develop it will gain a greater standing in the overall global governance structure. If successful its reputation will also grow. At the moment it is being observed; it is too early to determine how successful it will be.

However, with the increased participation of CSOs and NGOs, it will be under more scrutiny than most committees. The CSM is highly motivated to scrutinise the success of the CFS and the actions of its member states because it has been involved in the policy formation process and has partial ownership of it. Additionally it represents millions of small-scale food producers who have to live with the consequences of failure. Therefore the CFS is being monitored by organisations that have an in-depth understanding of the policies, have a stake in the policies’ success and represent the people most affected by their implementation. This level of scrutiny will ensure accountability as the CSM will mobilise its own members and public opinion if member states attempt to sideline the CFS or fail to implement agreed policies. In addition, if the CSM participation is successful there will be greater opportunities for CSOs to participate in other international organisations.

During each annual CFS plenary there are round tables, working groups, friends of the chair groups, side events as well as the plenary itself.[53] All these different meetings allow for discussion on all relevant issues, as do the informal lunches, receptions and evening gatherings. Each year the CSM also organises the Civil Society Forum as a preparatory event to the CFS. This is just the activity during the plenary itself. Throughout the year the work and communications continue ensuring the CFS is the hub to a network of individuals and organisations all working with the same aim; to tackle food insecurity. This interaction has created a network of actors that operate interdependently and this is one of the greatest strengths of the CFS.

Information that is perceived as objective, independent and reliable is vital to the CFS and this is demonstrated in the structure of the committee, which includes the High Level Panel of Experts (HLPE). It has three well-defined functions[54] designed to ensure the quality of the reports it produces, including the provision of "scientific and knowledge-based analysis and advice" (CFS, 2015b). It is composed of ten to 15 internationally recognised experts in areas relevant to the work of the CFS, who all have proven abilities in conducting quality research and accessing networks. As such the HLPE is able to produce reports, which

[53] As observed by the author at the CFS Plenary sessions in 2011 and 2012

[54] To assess and analyze the current state of food security and nutrition and its underlying causes; to provide scientific and knowledge-based analysis and advice on specific policy-relevant issues, utilizing existing high quality research, data and technical studies; and to identify emerging issues, and help members prioritize future actions and attentions on key focal areas. (CFS, 2015b)

may focus on contentious issues, but which are of sufficient quality as to be accepted as the starting point for debate by all participants.

However, information is not just provided by the HLPE. As there are many different participants in the CFS so there are many different sources of information. These sources may originate from member states, CSOs, NGOs or other interested parties. These sources may be of varying standards of objectivity and scientific rigor. In addition the CFS has the scope to take into consideration the opinions of those most affected by food insecurity and the challenges facing small scale food producers, and in so doing, arguably gains a deeper understanding of the issues. The CFS also draws on other sources, such as the FAO SOFI reports, which are presented to the committee each year. As discussed previously FAO produces a great number of publications relevant to food security and nutrition.

Through accessing a range of sources, including the experiences of different stakeholders, the CFS can gain a broad understanding of the issues. However by having its own HLPE, which is directed by the committee, it can obtain the information most relevant to and which can inform its programme of work. To ensure the reports of the HLPE have the gravitas required each member of the panel also has to possess this gravitas and in their own right be part of the epistemic community within the food security arena. Therefore, information and those that provide it are essential to the CFS and its reputation.

Conclusion

The CFS has become a very interesting case study in its multi-stakeholder approach to governance. If successful it may form the basis on which many more committees, within FAO and beyond, are constituted. It has the potential to provide a wide range of GPGs through its participatory role, which is exceptionally inclusive, and its global reach, not only of its policy recommendations but also the organisations with which it engages. However, it is too early to gauge its level of success. The CFS offers an opportunity for further study. The next chapter will examine the role of FAO in norms and standards setting.

Chapter Nine:
FAO and the Provision of GPGs:
Norms and Standards Setting

Introduction

FAO works in a number of ways to establish norms and set standards. In addition to its provision of statistics and publications and as a convener it is also an active partner in the formation of international agreements, voluntary guidelines and principles, codes of conduct and technical standards, as well as through the work of its departments.

This chapter will start by establishing the importance of norms and standards setting for FAO and the reform of that provision as part of the organisation's overall reform process. This will be followed by an examination of a small number of examples of FAO's normative work across different formats including international treaties, by highlighting the International Treaty on Plant Genetic Resources for Food and Agriculture and norms established as part of the MDG and SDG framework. In addition there will also be an examination of the role of FAO in the creation of guidelines and principles, by taking as examples the Voluntary Guidelines on the Responsible Tenure of Land, Fisheries and Forests in the Context of National Food Security and the Principles for Responsible Investment in Agriculture and Food Systems adopted by the CFS. This will be followed by a discussion on its standards setting work, by highlighting the International Plant Protection Convention (IPPC) and the Codex Alimentarius

Commission. As in the last two chapters this will then be followed by a discussion on the role of this work in FAO's provision of GPGs and through the four interlinked themes of regimes and international organisations.

Although normative work is an important part of FAO's role its value is difficult to ascertain. According to the IEE (2007, p.12) the organisation had "become trapped in a misleading discourse of 'normative versus operational'" which has had an impact on its ability to make critical strategic choices within the area of GPG provision. The IEE argued that this has contributed to distrust and "introduced definitional and conceptual confusion in the organisation." Member states have played a part in creating this confusion. The IEE (2007, p.12) found that "some members express the view that FAO should have no significant role outside the normative. Others tend to see the normative as primarily of interest and benefit to developed countries and claim that 'what FAO does on the ground is all that really counts'". The IEE argued that both of these viewpoints were vast oversimplifications and both disregarded FAO's mandate, which requires FAO to function both normatively and operationally to provide GPGs and ensure their accessibility to everyone who needs them.

The need for both functions has received recognition in the new Strategic Objectives, in particular the Sixth Objective, which is designed to "cover the provision of technical quality, knowledge and services for the organisation encompassing core normative work." (FAO, 2013d, p.21) In the new

organisational structure the majority of the normative work will be dealt with centrally by the corporate programmes and the departments, each with its own remit, will have as their main responsibility the enhancement of the technical capabilities of the organisation. The “departments will contribute to specific but limited areas of normative work in thematic areas and disciplines under their remit that cannot effectively be managed by the corporate programmes.” (FAO, 2013d, p.26)

This is part of the move to decentralise the organisation whilst maintaining its technical integrity and “building its capacity to mainstream key technical functions beyond institutional boundaries”. The Sixth Objective aims to achieve three outcomes, the first of which is the “quality and integrity of the technical and normative work of the organisation.”[55] (FAO, 2013d, p.26) The organisation’s normative role is also defined in the FAO’s seven core functions, the first of which is its normative work and standard setting instruments.

To ensure FAO is more effective than it has previously been this normative work has to deliver change. In his forward to the Reviewed Strategic Framework (FOA, 2013d, p.2) the director general set out his vision for the new, modernised and transformed FAO. “The aim is to improve the delivery and impact of FAO’s programmes by effective translation of our normative work into

[55] The second and third aims are to achieve: “quality and integrity of the data produced and analysed by the organisation” and “quality services, coherent strategies and approaches to work on governance and gender equality and women’s empowerment in the Strategic Objective programmes.” (FAO, 2013d, p.26)

country-level impact of our global knowledge products into tangible change in policy and practice.” By creating a better connection between the normative and operational work of the organisation FAO should be in a better position to address its first global goal; the elimination of hunger.

Not only does the normative work have to relate more directly to action on the ground but it also has to deliver a more general change in attitudes if it is to effect real change on a more permanent basis. Issues connected to food and agriculture are so wide-ranging and impact on so many other areas of concern, from resource use to climate change and trade policy to human rights, that if an approach based on sustainability were to be taken to address the challenges faced in food production many other positive outcomes would follow. This would require a paradigm shift; one which could be achieved if the norms relating to food production and consumption were addressed.

FAO’s director general outlined the challenges (Da Silva, 2015)

> *The input intensive agricultural development model that we have used for the past 40 years has worked well. But it is unsustainable in the long run. It is time for a paradigm shift. Business as usual would mean a huge and simultaneous increase in the need for food, energy and water in the next decades: 60 percent more food, 50 percent more energy and 40 percent more water by 2050.*

As with the strengthened three global goals of FAO the director general has again challenged the status quo and the neoliberal business-as-usual model. The main objective of FAO is to help achieve a food secure world; a one size fits all approach will not deliver food security for everyone. By repositioning the debate FAO aims to play a leading role in this new sustainable approach to food and agriculture.

Through the provision of statistics and publications, by bringing together different organisations, both state and non-state actors, as well as its work on international agreements, codes of conduct, technical standards and voluntary guidelines FAO has always been able to set norms and standards. However the IEE found that this work had been confused and therefore did not always have the desired impact. The new Strategic Objectives are designed to bring clarity and increased effectiveness.

The different types of work relating to norms and standard setting will now be examined. This work covers a wide range of issues and areas. It is not possible to give a comprehensive overview in this thesis therefore a small number of examples will be highlighted, including its work to protect genetic resources through the International Treaty on Plant Genetic Resources for Food and Agriculture, norms established as part of the MDG and SDG framework, the Voluntary Guidelines and Principles adopted by the CFS and the work of the

International Plant Protection Convention (IPPC) and the Codex Alimentarius Commission. These areas have been selected as they are good examples of the wide range of the norm and standard setting work performed by FAO, as well as being GPGs.

International Treaties

As a specialised agency of the UN FAO has an important role to play in the development of international treaties related to food and agriculture. One of the best examples of this work, which is also a GPG, is its work to protect genetic resources, through the Commission on Genetic Resources for Food and Agriculture (the Commission) and the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty) (FAO, 2015c). The Commission is the only intergovernmental forum that deals specifically with all components of biodiversity for food and agriculture. As part of its role it oversees and guides global assessments, negotiates global action plans, codes of conducts and other instruments relevant to conservation and sustainable use.

The Treaty is the only international legal and operational instrument that covers all plant genetic resources for food and agriculture (PGRFA). The Treaty assists this international cooperation through systems that include the Multilateral System of Access and Benefit-sharing (MLS) and the Global Information System on Plant Genetic Resources for Food and Agriculture. By establishing a plant genetic resources commons the Treaty is designed to lower transaction costs for conservation, research, breeding and training, as well as redistributing

back to the commons some of the financial benefits derived from the exploitation of some of the resources. The open exchange of genetic resources, through international cooperation, is essential to ensure food security (FAO, 2015c) and through this function the organisation is playing an important role in the provision of GPGs.

Negotiations for the Treaty took six and a half years from the 1st Extraordinary Session of the Committee in November 1994 to the 6th Extraordinary Session in June 2001. It was approved by FAO on 3 November 2001. It now has 135 contracting parties. (FAO, 2015g) The negotiation process had been long and arduous with many disagreements between developed and developing states. The scope of the materials to be included was one of the most contentious negotiating issues, as well as the terms of benefit sharing and intellectual property rights. In the end 35 crops and 29 forage genera were included in the MLS. There was also a disparity between the member states' ability to prepare for the negotiations, with African states at a clear disadvantage through a lack of intersessional regional meetings to enable them to debate the issues and agree a common stance. (Halewood and Nnadozie, 2005) The private sector also participated in the negotiations, most notably through the International Seed Federation, which directly or indirectly represents more than 10,000 seed companies around the world.

Despite the difficulty reaching agreement the Treaty is still seen as a significant achievement. Michael Halewood and Kent Nnadozie (2005, p.115) argue that it "represents a spirited reaction to the rising tide of measures that extend private or sovereign control over genetic resources." It recognises the fact that agricultural biodiversity must be treated differently given its essential role in food security provision. Now that this step has been taken Halewood and Nnadozie (2005, p140) argue that this model could be adapted for use in other international systems for a wider range of genetic resources. "The existence of such a mechanism should encourage states to see the proliferation of such commons-based systems as a real possibility."

Through the Treaty and the Commission FAO assists member states to develop effective policies for the conservation and sustainable use of plant genetic resources. It has also built international awareness about the importance of such work, supported capacity building and strengthened information management and exchange. The importance of this work will become ever more apparent as the significance of genetic resources gains greater and wider recognition. FAO is leading the way in this field.

Norm Setting as part of the MDG and SDG framework

FAO has played an important role in the development of the MDG agenda, on issues relating to food security, and it is now one of the specialised UN agencies

working on the SDG framework. Established in 2001 the MDGs set the agenda for development in the first 15 years of the new millennium and have "produced the most successful anti-poverty movement in history" (UN, 2015c, p.3). The eight time-bound targets have helped to mobilise efforts to lift millions out of poverty, improve health and well-being and give people opportunities for better lives.

There has been good progress made towards meeting the first MDG; to eradicate extreme poverty and hunger. According to the most recent MDG report (UN, 2015c) the number of people now living in extreme poverty has declined by more than half, falling from 1.9 billion in 1990 to 836 million in 2015. There's also been a rise in the number of people identified as in the working middle class, which is anyone living on more than US$ 4 a day. This number has nearly tripled between 1991 and 2015. The proportion of undernourished people has dropped by almost half since 1990. However, the report acknowledges more progress is needed as there are more than 90 million children under five who are still undernourished and underweight and globally there are 795 million people estimated to be hungry.

Although targets on alleviating poverty were reached relatively easily progress on hunger has been much slower than expected.[56] Ben Belhassen highlighted the critical shortcomings in the design of the MDGs, which he argued took a

[56] Personal interview with Erwin Northoff

siloed approach to development and had insufficient emphasis on sustainability. Food security and nutrition suffered as a direct result. Belhassen (2015, p.1) argued: “The MDGs’ exclusive focus on reducing hunger – certainly one of the gravest human conditions – unfortunately left many facets of food security unnoticed, almost completely bypassing the problem of malnutrition, and disconnecting both these issues from agriculture and natural resource management.”

He was more optimistic about the potential of the SDGs following the publication of the Open Working Group’s final report in 2014 which he argued represented a “breakthrough document that does not shy away from tackling critical issues such as governance, trade, climate change, inequality, peace and security and the means of implementation.” (Belhassen, 2015, p.1-2) He welcomed the emphasis placed on national ownership of the goals and the comprehensive vision for food security, nutrition and sustainable agriculture. Business as usual is not an option in the face of increasing economic, social and environmental challenges; he therefore called for a paradigm shift in agricultural production systems. He argued (2015, p.2) that “this means investing in the capacities, and securing the tenure rights of the half a billion or so smallholder farmers who produce most of the world’s food, in order to help them remain stewards of natural resources and environmental wellbeing.”

The SDGs are therefore seen, not only as the next step in the development agenda to guide policy and funding for the next 15 years, but also as an opportunity to create a much better framework, learning from the MDG experience. The overall aim of the SDGs is to “end poverty. Everywhere. Permanently.” (UNDP, 2015) In response to criticism of the MDG development process, which had been seen as an exclusive donor driven agenda with little involvement of developing countries and other stakeholders, (Fehling, 2013) the UN invited a diverse set of stakeholders to participate in the development of the SDGs, including governments, UN agencies, civil society, NGOs, the private sector, academics, research institutions and ordinary citizens. As part of this global conversation 7.3 million people ranked their priorities for the future as part of the United Nation’s My World survey, national consultations were held in almost 100 countries, there were 11 global thematic consultations and six consultations on the means of implementation (UNDP, 2015). Through all these different channels people have demonstrated their wish to be part of the decision making process; to help set the agenda.

FAO has also played a crucial part in the process by co-leading one of the 11 global thematic consultations. The organisation co-led the consultation on hunger, food security and nutrition with the WFP and also supported meetings of the Open Working Group (OWG), which is one of the two distinct streams of the agenda process; the second is the Intergovernmental Committee of Experts on Sustainable Development Financing. Both were initiated by member states in

2012 at the UN Conference on Sustainable Development in Rio (Rio+20). Taking the input from all the different stakeholders the OWG (2014) has put forward a chapeau, 17 goals and 169 targets. Debates based on these goals and targets have been held at high-level meetings in the UN in 2014 and 2015 with the final decision expected at the Summit of Heads of State and Government level between 25 and 27 September 2015. (FAO, 2015h)

If member states endorse and adopt the proposed SDGs outlined in the OWG report the development framework for the next 15 years will be much more holistic than the previous MDGs, with ambitious goals and clear objectives outlining the best way forward, with long-term benefits for everyone.

FAO is a key player in this new development chapter. SDG2 (UNDP, 2015) which aims to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” is obviously under FAO’s remit; however SDG 6, SDG14 and SDG15 are also very closely linked to the work of FAO being concerned with water, oceans and forests. In addition, FAO’s work is also instrumental to areas covered by SDG1, SDG3, SDG5, SDG8, SD12 and SDG13, based on poverty eradication, health and well-being, gender equality, economic growth, consumption patterns and climate change. FAO will play a vital role in delivering the new SDGs in many different ways. Its proven ability to include many different stakeholders and work in partnerships will prove to be

one of its main strengths in the implementation of the post-2015 development framework.

Voluntary Guidelines and Principles

Through its convening role FAO is able to bring a range of different actors together, which is the starting point for debate. Within this space actors can then work together to establish guidelines and principles. There can often be disagreements, especially when contentious issues are discussed, and sometimes not all partners endorse the final product but even in these cases the debate has begun. By agreeing voluntary guidelines and principles actors have a framework on which to build.

At a special session of the CFS on 11 May 2012 the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security were endorsed. This was seen as a significant landmark for the CFS and for those who had worked tirelessly on this contentious issue. Agreement had been reached after many rounds of multi-stakeholder discussions and consultations. The debate had also been informed by the HLPE report,[57] which had been commissioned by the CFS in October 2010 and published in July 2011. The aim of the guidelines is to promote secure tenure rights and equitable access to land, fisheries and forests to help eradicate hunger and poverty, through the provision of a framework that states can use when developing strategies, policies, legislation and programmes.

[57] Land Tenure and International Investments in Agriculture (HLPE, 2011)

Consultations took place during 2009 and 2010, through regional meetings that brought together almost 700 people from 133 countries, representing the public and private sectors, civil society and academia. Four consultations were held specifically for the civil society organisations of Africa, in Mali; of Asia, in Malaysia; of Europe and Central and West Asia, in Italy; and of Latin America, in Brazil. These consultations were attended by almost 200 people from 70 countries. These were in addition to the 70 people from 21 countries from the private section (CFS, 2012d). A questionnaire was also made available via the internet to allow more people to participate in the process.

These CSO regional meetings and questionnaire were used to inform a CSO document (2010) that outlined the CSOs' vision and aspirations as well as covering a wide range of issues relating to land tenure. At the start of the consultation process the CSM urged the CSOs to participate as there would be many benefits despite the fact these would be voluntary guidelines and not binding legislation. The guidelines would help to clarify the content of existing obligations and legislation relevant to land tenure issues, such as human rights laws, including the rights to adequate food, housing, health and work, as well as environmental laws. Participation was also seen as an important contribution to the "more democratic global governance of food and agriculture based on the

UN system, the subsidiarity principle[58] and the institutionalised participation of social movements and other civil society organisations." (CSM, 2010)

Issues surrounding land tenure rights evoke strong reactions as they are often associated with land grabbing, as discussed in chapter one. The CSM argued that in recent decades most of the agenda setting and decision making concerned with land and natural resources have been heavily influenced by IFIs, with disastrous consequences. However, the CSM voiced its optimism in the reformed CFS and FAO as a whole. "FAO as a multilateral exchange forum and specialised UN agency with a mandate to work on normative issues related to food and agriculture and the current process of reform of the CFS offer a more democratic arena to achieve a multilateral agreement on land and natural resources governance." (CSM, 2010)

Negotiations continued, through meetings and via the internet, based on the three drafts of the guidelines between April 2011 and May 2012. Throughout the process the CSM continued to call for greater protection for small-scale producers, the food insecure, poor and marginalised groups, who were worst affected by large scale investment in land. During the final stages of the negotiations the CSM argued that CSOs were particularly concerned about the "widespread hostility of states to recall their human rights obligations" and

[58] The Principle of Subsidiarity is based on the notion that problems should be dealt with at the most immediate or local level and that a central authority should have a supporting function. It is fundamental to the functioning of the European Union and contributes to decisions being taken as closely to the citizen as possible. (Eur-Lex, 2010)

fearing any new commitments “many governments are doing all they can to weaken the language and the recommendations.” (CSM, 2011)

When the guidelines were finally endorsed the CSM voiced the CSOs’ mixed reactions to the final document (CSM, 2012). The process itself, which had allowed the CSOs full participation at all stages, including the negotiations, was praised and commended for use in the entire UN system. It was acknowledged that several principles important to the CSOs had been recognised, in particular those relating to human rights in the context of tenure and the clearly defined principles of implementation. However, the CSM outlined the issues which were still of concern including the fact the guidelines did not challenge the role played by large-scale investments in industrialised agriculture, fisheries and forests, the failure to further consolidate the rights of indigenous peoples and the exclusion of water from the scope of the guidelines.

Similar to many issues related to food and agriculture land tenure is very complex. States would be unwilling to create binding legislation that would limit their ability to act now or in the future and so agreement on voluntary guidelines in this area is the most that can be expected of states in this first stage of negotiation. However once the norms have been accepted they may then develop in the future.

> *With guidelines in place you have something to work on, political parties can use them and so can civil society. And*

> *then there will be one milestone reached after another; it's an evolution in incremental steps. Complexity has an impact on the process; the situation is very complex, as is the process, which means that the voluntary guidelines also have to be complex.*[59]

It is beyond the remit of this thesis to examine the many issues surrounding tenure rights; however the type of governance within a state is recognised as a key contributing factor. Establishing good governance can have a significant and positive impact. In the guidelines (CFS, 2012d) it is noted that "many tenure problems arise because of weak governance and attempts to address tenure problems are affected by the quality of governance." Weak governance can have negative consequences in many different areas but "responsible governance of tenure conversely promotes sustainable social and economic development that can help eradicate poverty and food insecurity and encourage responsible investment." (CFS, 2012, p.5)

Many individuals and groups taking part in the negotiations for these voluntary guidelines will hope that these represent the first step in an evolutionary process towards a more formalised system of tenure rights for land, fisheries and forests. There will also be some organisations and individuals, such as multinationals and corrupt state officials that profit from agribusiness land deals,

[59] Personal interview with Erwin Northoff

which hope these guidelines signal the end of the process and business can continue as normal. The CSOs will have an important but challenging role to play in their communities and home countries ensuring these guidelines are implemented. However, by taking part in the negotiation process these CSOs have gained an in-depth understanding of the guidelines and the states' legal obligations based on human rights and environmental legislation. They have also created a strong global network, on which they can rely for support in any action they may deem necessary to encourage implementation. This will continue to be an interesting area of research.

Following the success of the agreement on tenure rights the CFS has, through another round of multi-stakeholder consultations and negotiations, reached agreement on the Principles for Responsible Investment in Agriculture and Food Systems (2014d) which were approved at the CFS on 15 October 2014. If agreement on voluntary guidelines can be seen as a first step in setting in norms in a contentious area establishing principles is the preliminary stage in the process. However tenuous these principles may be as voluntary and non-binding on member states and non-state actors, they nonetheless represent the first global consensus between governments, private sector, CSOs, UN agencies, development banks, foundations, research institutions and academia on what constitutes responsible investment in agriculture and food systems that contribute to food security and nutrition. (CFS, 2014d)

FAO Director General Jose Graziano da Silva applauded the agreement and argued the principles would “enable larger and more sustainable investment in agriculture while also making all stakeholders responsible for creating the conditions for the principles to be met. The private sector will play an important role in implementing the principles.” (Da Silva quoted in FAO, 2014d)

Not all parties to the negotiations were as positive about the principles or the role to be played by the private sector. CSOs have been campaigning for effective legislation to regulate private investment in agriculture for many years, at the World Trade Organisation, and across fora. In the CFS the CSO delegation to the 36th session of the CFS in 2010 had successfully blocked the endorsement of the Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources (RAI) which had been developed by the World Bank, UNCTAD, FAO and IFAD the previous year. At the time the CSOs (CSM, 2014b) declared:

> *The RAI is not an adequate instrument to regulate private investment; moreover, RAI principles have been formulated through an exclusive process without the participation of communities and constituencies most affected by agricultural investments, especially private investments.*

The CSOs then welcomed the opportunity to take part in an inclusive negotiation process, involving regional consultations and three rounds of debate

centred on the development of the principles document. Throughout the process the CSM put forward the CSOs' position on investment with the focus on the constituents of civil society. The final principles document failed to meet the key points on which their position was based, including protection for small-scale food producers. The CSM argued that "the principles stand or fall as a whole and their foundation is fundamentally flawed...Civil society is concerned that the weaknesses and incoherence in the principles will be used to legitimise irresponsible investments." (CSM, 2014c)

FAO estimates that there will have to be an average net investment of US$ 83 billion a year to raise agricultural production by 60 percent to feed the expected global population of nine billion by 2050 (CFS, 2014d). All stakeholders agree that increased investment is needed however there will continue to be serious disagreements between the two opposing perspectives on where this investment would be best placed. CSOs argue that small-scale food producers are already feeding the majority of people now and given adequate protection, as well as investment, they will be able to feed even more. Although they have been disappointed with the results of this consultation process the CSOs must continue to participate because until now their views had not been heard at all in global negotiations.

Standards

The work that FAO performs as part of its standards setting is important in establishing the recognised international standard in each area of concern. The

organisation's reputation is a crucial element in this work to ensure these standards can be upheld in international courts as part of dispute settlements, as is the case with those set by the International Plant Protection Convention, as discussed below.

There are many risks to the health of plants, animals and humans that can travel across borders, especially with the increase in the globalised food trade, which is worth approximately US$ 200 billion annually (Codex Alimentarius, 2015). These risks need to be recognised and protections put in place, which necessitates international agreements. One such accord is the Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement), which is an international treaty of the World Trade Organisation. Through this agreement member states have to comply with international standards relating to food security, which covers bacterial contaminants, pesticides, inspection and labelling, as well as animal and plant health, known as phytosanitation, with regards to imported pests and diseases (WTO, 2015c).

The agreement is not only designed to protect consumers' health but also to ensure fair practices in the food trade. The SPS Agreement states that "Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence." (WTO, 2015c, Art 2 (2)) It continues "Sanitary and phytosanitary

measures shall not be applied in a manner which constitutes a disguised restriction on international trade." (WTO, 2015c, Art 2 (3))

To ensure decisions are based on scientific evidence there are three standards organisations that assist member states. Two of these are connected to FAO: the Secretariat of the International Plant Protection Convention (IPPC) and the Codex Alimentarius Commission (the Codex). The third organisation is the World Organisation for Animal Health (The Office International of Epizootics, OIE).

The IPPC is a multilateral treaty for international cooperation in plant protection. Initially established in 1952 it has been amended twice, the most recently in 1997 when it was updated as part of the Uruguay Round Agreements of the WTO, to ensure it was compatible with the WTO-SPS Agreement. Its aim is to protect cultivated and wild plants by preventing the introduction and spread of pests. Its work with member states on these preventative measures is designed to help preserve food, biodiversity and to facilitate trade. There are 180 contracting parties and a secretariat based in Rome. Each party has a National Plant Protection Organisation and there have been ten Regional Plant Protection Organisations established around the world. The IPPC is recognised by the WTO as the international standard setting body responsible for plant health standards. (Peralta, 2013)

The relationship between the IPPC and WTO is a two-way process, between science and trade, creating opportunities for the improvement of standards.

> *The SPS Agreement was created as a part of the WTO rules with focus on trade. It was written by legal people, not scientists, but the work of the IPPC is science-based. The WTO asks advice from the IPPC, which has scientific discussions and then provides guidelines so that the WTO doesn't have to start from scratch. By participating in the development of standards it means the IPPC gets better standards; we're always improving.*[60]

The remit of the IPPC is very broad covering all types of agricultural plants and plant products as well as all conveyances, non-agricultural plants and plant products, the pest risks associated with living modified organisms (LMOs) and it also applies to aquatic plants. It concerns a wide range of pests as well, regulated and non-regulated, which includes "any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products – fungi, insects, bacteria, viruses, weeds." (Peralta, 2013)

> *This is a young body but the expectations placed on this section are huge. As part of the FAO reform some units are shrinking but the IPPC is increasing with more voluntary finding coming in. But we need more resources. We've set 35 or more standards since the 1990s but*

[60] Personal interview with Yukio Yokoi, Secretary of the IPPC Secretariat, FAO, Rome, 2013

there's over 100 topics still waiting for standards. We can only do three or four a year.[61]

The IPPC has a close working relationship with the Convention on Biological Diversity (CBD) as there is increased interest in plant protection, especially from those concerned about the environmental risks. Recently there has been greater acknowledgment of the increased risks, especially with the increase in the movement of people and in trade, and the changing nature of global trade. Pests can be carried in many different ways and certain methods of transport, such as sea containers, are creating new challenges.

Ten years ago we set standards regarding the wooden pallets and containers used for sea freight. Now sea containers are proving a very different but important issue; it's a much more complex situation now. Sea containers are used repeatedly beyond national borders, loading and reloading different products in many places. Who checks to see if the sea containers are safe and who has the responsibility to say they are OK? We are providing the forum for the discussion.[62]

The work of the IPPC is varied and wide ranging, as is that of the Codex. Both organisations are providing the scientific evidence required by the WTO's members to ensure food safety and facilitate trade. However, acting as an

[61] Personal interview with Yukio Yokoi

[62] Personal interview with Yukio Yokoi

adjudicator between two potentially opposing perspectives may place each organisation in a difficult position. This question is beyond the remit of this thesis but would be an interesting avenue of research to pursue.

The Codex has the responsibility for implementing the Joint WHO/FAO Food Standards Programme, which was established in 1963, and so predates the WTO (1994) but not its predecessor the General Agreement on Tariffs and Trade, created in 1948. The first meeting of the Codex in Rome brought together 120 delegates from 30 countries and 16 international organisations. At its 35th session in 2012 there were 625 delegates from 145 member states, one member organisation and 34 international organisations and NGOs. It has established hundreds of standards, guidelines and codes and set thousands of maximum limits, as well as found "a way of working together based on science and built on trust." (Codex Alimentarius, 2015)

Norms and Standards Setting as a Global Public Good

FAO's normative role has always been important for the organisation but it had become fragmented, disorganised and ineffective before the reform. Through the new strategic objectives, most notably the sixth objective, it has now regained its place within FAO, which will be beneficial to the organisation as a whole and also its ability to provide GPGs, especially the overall aim of ensuring food security.

Norms and standards are designed to be inclusive and non-rivalrous, in fact the more member states, organisations and individuals accept the norms and standards the more established they become and the more power they possess. In so doing they occupy the opposite position to a rivalrous good as they grow in strength with use rather than become diminished.

The inclusive nature of the consultation process for the SDG framework has brought into the discussion millions of people, through the use of the internet. This was essential for the UN to avoid the same criticisms that had been levelled at the MDGs and to ensure greater engagement in the overall process, which will hopefully lead to greater overall success. The world has changed in the last 15 years; the internet has allowed people to become more actively engaged in many different arenas, from reviewing hotels to participation in global social justice campaigns. Individuals expect to be able to voice their opinions and will not be satisfied with any system that does not allow this. This desire for involvement has also been seen throughout the CFS reform and the CSO participation in the negotiations for the voluntary guidelines and principles.

By their very nature the norms and standards discussed in this thesis are global and are aimed at assisting this generation as well as future generations. The MDGs and SDGs are designed to bring all member states of the UN together to tackle the largest development issues of this century. The Treaty and Commission act across regions, across the world to create a plant genetic

resource commons redistributing the financial gains made from their use to assist this generation and protecting them for future generations. The voluntary guidelines on land tenure and the principles on responsible investment have been created to establish a norm for good practice in these areas; the wider the acceptance of these new norms, the more likely they are to succeed. And the IPPC and Codex are only successful if all states implement measures to limit the movement of pests.

The Role of Norms and Standards Setting in FAO as an International Organisation

The role of norms and standards is important to the work of FAO as is the way in which agreement is achieved. This has been highlighted in the reform process as the organisation's normative work has now been centralised in the corporate programme. There has been a recognition that the normative work needs to deliver results and so the changes that are being made now are aimed at making FAO more effective overall.

As always the main actors in the setting of norms and standards are member states, however there are many more different actors involved as participation is broadened. The inclusion of non-state actors, most notably CSOs, in the CFS has proved successful and will have implications for further normative work and implementation. In addition the participation of so many different groups and individuals in the global debate on the new SDG framework has added a new

vitality to the process, which will hopefully ensure a greater level of overall success. This will be possible if people are vigilant and put pressure on member states to deliver positive change.

FAO is the main organisation working to establish norms and standards within the food and agriculture arena. There are other organisations, such as the WTO, that are operating in adjacent areas, which may overlap FAO's territory, but FAO has to protect its own reputation within the areas under its remit. This is not an easy task as most of the issues are complex, interlinked and often contentious. It is responsible to its member states but these do not represent a homogeneous group; instead the states form smaller groups, such as the OECD, the G20 and the G77 and China, which all have different priorities and agendas.

FAO has to take into consideration the perspectives of all its member states, as well as the many non-state actors that are involved in the norm setting process. However, if there is within the organisation a consensus on the best way to achieve food security then this approach should be promoted through all its norms and standards. There have been arguments put forward by the director general, in the three global goals and in reports for a paradigm shift towards a more sustainable agriculture. If these arguments were to be accepted by member states it would have a positive impact on many integrated and wide ranging food and agriculture issues. It would also be another step away from the

one-size-fits-all neoliberal market driven approach, which has been responsible for increased privatisation, as discussed in chapter one.

One of FAO's strengths is its ability to bring together many different actors. By bringing together these state and non-state actors, facilitating collaboration and enabling the formation of partnerships and networks FAO is ensuring, not only a better chance of agreement on norms and standards, but also a better chance of successful implementation. Partnerships are essential to the normative work of the organisation.

Reliable and trustworthy information is essential to FAO; it helps inform the debates and set the agendas. For example, reports used by the CFS have to be accepted by all participants as a reliable starting point for debates and statistics provided by FAO have to be trusted if they are to inform the global debate on the new SDG framework. The science-based information provided by the IPPC also has to be above reproach for use by the WTO in trade disputes over trade barriers.

Those that provide this information, from the HLPE to the statistics department, play a vital role. However, it is not just the experts who have a voice; through the internet questionnaires and consultations millions of individuals have also been heard. These are also legitimate perspectives that should be taken into consideration.

Conclusion

FAO's normative work is not only important for the organisation to help it establish itself centrally in the food and agriculture arena, but also for the wider world, which benefits from the GPGs that are provided as a result of it.

All of the areas highlighted are clearly GPGs. For example, the voluntary guidelines and principles may be non-binding on member states, but at least they represent the first step in the process of formalising the governance on these contentious issues. They also give non-state actors a platform on which to campaign for better protection for small-scale food producers.

The Treaty and Commission on genetic resources again have placed a complex and divisive issue on the agenda and compelled member states to consider the importance of these resources to the future provision of food and agriculture. This is a first step and if successful will have positive implications for food security for this and future generations.

If FAO is successful in its normative work it will have helped to set the agenda and shift the focus onto broader human security issues. Whilst doing this it has also brought together many different organisations and individuals. These strong networks will play an important role in ensuring the norms and standards are communicated widely and the issues remain on the international agenda.

The role of FAO in the provision of GPGs, through its three main roles in measurement, as convener and its norms and standards setting role, and its ability to continue to do so will be discussed in the next chapter.

Conclusion:
The potential of FAO in the provision of Global Public Goods

Introduction

The global food system is unbalanced and unfair; it needs to change. There are almost one billion people hungry and as many as two billion suffering the life-long consequences of micronutrient deficiencies. In addition industrial agriculture is responsible for the provision of numerous global public bads from significant greenhouse gas emissions to extensive water pollution (De Schutter, 2014; Beddington, 2009; FAO, 2011d). As the UN's specialised agency with a global mandate covering all aspects of food and agriculture FAO is in a unique position to help facilitate the changes that are required. However, FAO does not operate in a vacuum; instead its actions are governed by the different actors within the international system; states being the main actors in this anarchic state-centric arena, and the dominant ideology used to determine policy, which for the last three decades has been driven by a market-based neoliberalism.

Aim of the Thesis

The central argument of this thesis is based upon the hypothesis that the challenges faced by the global food and agriculture system in the twenty-first century are unlikely to be resolved through the implementation of neoliberal policies. One main question and two secondary questions were put forward as part of the investigation to determine the validity of this hypothesis:

- Is FAO in a position to provide a food secure world?

- Following the extensive reform of the organisation is FAO now in a stronger position to provide the GPGs required?
- Will a shift in emphasis to the provision of GPGs offer an alternative to neoliberalism?

The investigation centred on the ability of FAO to provide a range of GPGs that would lead to a food secure world, which is the primary aim outlined in FAO's first global goal (FAO, 2013d). The organisation operates in a number of ways to provide GPGs, most notably through its three main roles; measurement, convening and norms and standards setting. These GPGs play an important role in facilitating improvements in the food system, whether that is by providing information that can aid greater understanding to inform policy decisions, bringing together different actors and providing a space in which to discuss contentious issues, or providing a set of norms on which debate can be based. Ideally FAO will be in a position to provide all these GPGs as interconnected goods that deliver benefits in many different ways and on a number of levels. It has to be noted that although the organisation also delivers a wide range of valuable technical programmes these in the main have a local or national focus, and so do not qualify as GPGs.

Through the examination of the GPGs that FAO provides and a historical analysis of the organisation, as well as its reform process, this thesis has set out to determine if FAO is in a position to provide a food secure world. It has been argued that through its provision of GPGs it is indeed in a strong position to

contribute to the provision of a food secure world but only as one organisation, among many, working for the same aim. Unfortunately, a world, in which everyone has sufficient food, although theoretically achievable, is not yet within sight. Nevertheless, given its historical and central position within the food and agricultural arena FAO is in a stronger position than any other organisation to lead the way in the provision of GPGs to help achieve this laudable aim. Following its reform, with its streamlined objectives and renewed focus and energy, it is in a much stronger position to lead the way. In addition, taking FAO's provision of GPGs in relation to food and agriculture, the shift in emphasis to GPG provision can arguably offer a viable alternative to neoliberalism. This thesis argues that this is especially evident as GPGs take a wider and longer-term perspective, to address transnational and intergenerational issues, which are so relevant in agricultural production, as well as food access and distribution.

Measuring, convening and norms and standards setting were selected for investigation as they form part of FAO's main work within the global arena and they fulfil the criteria of GPGs as non-excludable, non-rivalrous, global and intergenerational. These three roles also allow for the analysis of FAO through the four key themes outlined in the theoretical framework; main actor identity, level of autonomy, interdependence within the international system and the level of importance granted to information and the communities that provide it. By placing an emphasis on the provision of GPGs and by creating an inclusive

negotiating process FAO has moved further away from a purely market-driven neoliberal agenda. However it can be argued the organisation has never completely adhered to the ideals promoted through neoliberalism. GPGs are ideologically opposed to market-driven neoliberalism, with a wider focus taking into consideration trans-boundary and intergenerational elements, as well as a focus on the public rather than the private, and therefore offer an alternative to neoliberalism.

The data gathering for the research was conducted on three separate visits to FAO headquarters in Rome; it included a number of elite interviews, the attendance of two CFS meetings and through extensive examination of primary and secondary sources, including those contained in FAO's library. Throughout the duration of the research FAO was in the process of implementing the most extensive reform in its history following the IEE. It is hoped that this reform will strengthen FAO's ability to provide a range of important GPGs, through which it will be able to play its part in creating a food secure world.

FAO's Challenges

FAO is placed at the centre of the food and agriculture system, an ideal position from which to offer a range of GPGs; in fact it is the only organisation in this position. Nevertheless, despite its centrality; a position it has occupied for seven decades, the organisation has faced mounting criticism, from both its member states and non-state actors. This loss of faith led to the extensive evaluation conducted by the IEE, which prompted the re-evaluation of FAO's global goals

and strategic objectives, and initiated the root and branch reform of the organisation. The question is; have these reforms placed the organisation in a stronger position to provide the GPGs now required?

In order to answer this question it has been necessary to examine food security in the twenty-first century; in particular the challenges of food insecurity and the international instruments designed to alleviate these problems, the methods of agricultural production and the impact that they have socially, economically and environmentally, as well as the reasons for the most recent food price crisis in 2007-2008. The food price crisis was one part of the overall global financial crisis; both occurred in part as a result of neoliberal policies implemented in a wide range of arenas, through increased financialisation, liberalisation and privatisation.

Through this examination of the food system it was found that although there is widespread agreement on the need for a world in which everyone has sufficient food to eat there is little consensus on the best way to accomplish this. Agricultural production is contentious; different methods of production provide not only food, but also global public goods or bads. Agriculture, if conducted in a sustainable manner, has the capacity to produce a number of very important global public goods, such as environmental protection, social benefits and rural livelihoods, as well as nutritious food to maintain a population enabling everyone to reach their own social, educational and economic potential. FAO is in a

strong position to facilitate these GPGs by providing a range of its own GPGs, through its three main roles; measurement, convening and norms and standards setting.

However, although sustainable agriculture has the capacity to provide these GPGs many methods of industrial agriculture are responsible for a wide range of global public bads. To inform the research the impact of market liberalisation was assessed, as well as the promotion of industrial agriculture over sustainable methods, often employed by small-scale farmers, and the affect that this continues to have on climate change, water and land.

Many of the policies pursued through neoliberalism have had a direct negative impact on food security. These policies have included unbalanced and unfair levels of market liberalisation; the promotion of industrial agriculture with increased mechanisation and through the 'green revolution' with its over-reliance on oil-based inputs and genetically modified seeds and detrimental impacts on water quality and quantity, as well as significant greenhouse gas emissions (De Schutter, 2014; IAASTD, 2009; Wanki, 2011; McKeon, 2013; McMichael, 2013). These are in addition to the privatisation of land, which has allowed large-scale investors to appropriate large tracts of land, in what have become known as 'land grabs' and increased biofuel production, as well as the deregulation of the financial markets, which has led to high prices and extreme volatility in the commodity markets (Weis, 2007; Clapp, 2006; WDM, 2012;

Elliot, 2014). Many of the arguments put forward as part of food security discourse have been used to justify industrial agriculture. (Nally, 2015) However, Sen (1980, 1981, 1986, 1989) argued in his 'entitlements' approach, increased production will not solve these challenges; instead people's access to food needs to be addressed.

Many of these neoliberal policies have been implemented through IFI structural adjustment programmes throughout the 1980s and 1990s, through which many forms of state assistance for small-scale agriculture were limited or removed completely and markets were liberalised in developing countries, which often proved ruinous for small-scale farmers, whilst protecting industrial food producers in developed countries, most notably the US and EU through the continued use of substantial subsidies and tariffs. Many of these policies have had significant negative impacts on small-scale farmers, communities, especially the poor in developing countries, and the environment. As such industrial agriculture often provides a number of global public bads, the cost of which are not factored into the cost of production but instead borne by those least able to bear it. (Weis, 2007; De Schutter, 2014; Clapp, 2006)

Nevertheless there are various methods of agricultural production, such as agroecology, which produce a number of GPGs from the basic product, food, to environmental sustainability and rural livelihood development. (WDM, 2012; HLPE, 2013; IAASTD, 2009) Therefore the promotion of a more sustainable

type of agriculture could assist in the provision of GPGs. Agriculture can be part of the problem, especially in relation to environmental damage and climate change, and so it has to form part of the answer. There is an expanding community of individuals and organisations, backed by an extensive and increasing body of evidence, which is challenging the policies of market-driven neoliberalism (De Schutter, 2014; IAASTD, 2009; Wanki, 2011; McKeon, 2013; McMichael, 2013). It is accepted by many that the business-as-usual approach is unsustainable and cannot continue. Would a shift of emphasis to the provision of GPGs offer an alternative to neoliberalism?

GPGs as an alternative to Neoliberalism

As non-excludable, non-rivalrous, global and intergenerational GPGs are not only clearly suited to international organisations, as these organisations are the only entities within the international arena with the capacity, reach and mandate to provide them, but they also provide an alternative to the market-based policies of neoliberalism. With a wider holistic perspective across state borders and across generations GPGs are far removed from the narrow and immediate considerations of monetary gains and their non-excludability and non-rivalrous aspects are in direct opposition to the financialisation and privatisation of neoliberalism. GPGs may offer an instrument through which a rebalancing between the public and private spheres can take place, bringing back into the public arena control of many elements that have been privatised.

However, despite their appeal as an alternative to neoliberalism GPGs have to overcome a number of challenges for successful implementation. Recognition of the connection between the required good and the action to provide it has to be made and agreement on this may prove problematic, especially as an international organisation, such as FAO, is far removed from any individual who may benefit from such a good. This connection, which can help create legitimacy and deliver a mandate for action, is essential when making the case for additional funding for the provision of GPGs and maintaining the political will to implement policies, which may benefit future generations at the immediate expense of the present generation.

International organisations may be in the best position to provide GPGs but there are many stages in the process between the identification of an issue that needs to be addressed and the implementation of policies to achieve change. Change requires active participation at each and every stage to ensure success, without which the dominant status quo will prevail, especially if there are powerful and well financed actors with vested interests in the maintenance of the current system. International organisations have to be able to put forward a convincing argument that there is a need for action in a certain area, and that the best way to address the issue is with the provision of a GPG rather than a market-based solution, and that as the international organisation with a remit in this area, it is in the best position to provide it. Once this level of agreement has been achieved the international organisation then has to create the best arena

for its member states and other entities in which to reach agreement, not only on the best way to achieve success but also who will fund it. International organisations can play a facilitation role in the implementation of GPGs by bringing together different actors and helping to inform the debate.

These are significant obstacles to the provision of GPGs, nevertheless by having clear goals and a strategic plan for achieving success progress can be made. For example, FAO has set the eradication of hunger as its primary goal. It has also emphasised the need for sustainable rural development and the sustainable management of natural resources for this and future generations. These goals have widened the debate from the narrow financial targets, such as profit and low inflation, set through neoliberalism to one which takes into consideration a range of goods including the development of rural communities and environmental protection, as well as the welfare of future generations. However these goals cannot be achieved by one organisation; partnerships are essential for any level of success in attaining these very ambitious goals. The GPGs that FAO provides are goods designed to promote partnership working through which progress can be made.

FAO within the International System

FAO does not operate in a vacuum. Instead its actions are governed by the different actors operating within the international system and the dominant ideology used to determine policy. Six main theoretical approaches can be identified when attempting to explain the interaction between the different actors

within the international system; realism, neo-realism, liberalism, neoliberalism, constructivism and cognitivism. There are four key themes addressed by the six main theories, which have been used in this thesis to examine the role of FAO in relation to its provision of GPGs. They are main actor identity, level of autonomy, interdependence within the international system and the level of importance granted to information and the providers of this information.

States are still arguably the main actors within FAO, as the entities that have the ability to make the final decisions and as the organisation's funders, but there are a number of other non-state actors now taking a greater role in the negotiating process. At the creation of FAO the champions of nutrition formed the epistemic community, which Haas (1993) would recognise as networks of professionals. In the twenty-first century these networks, include not only the staff at FAO, but also a wide range of non-state actors, such as the CSOs taking part in the CFS, which have a form of legitimacy difficult to deny. For example, La Via Campesina acting on behalf of two million small and medium-scale farmers can offer a perspective lacking in diplomatic circles. In addition, as a voice of those most closely affected by food insecurity and the policies implemented they have a strong desire to see people-focused policies succeed. By providing the space in which all these actors can meet and debate all the relevant issues FAO is providing a GPG that enables partnership building and effective policy formation. Therefore, although states are still the main actors FAO has brought together a number of additional non-state actors to work

alongside states allowing for increased interdependence within the international system.

As a knowledge-based organisation FAO places great emphasis on information. It does this through the provision of statistics and publications that are then freely available to all and able to form the basis for debate, on a range of different issues, many of which are contentious. To be accepted as the basis of any debate on these contentious issues the information has to be seen as trustworthy and reliable by all actors. To achieve this level of acceptability the providers of the information also have to have a reputation for honesty and integrity. This information and the communities that provide it are seen as very important within FAO and beyond and as such form part of the epistemic community.

FAO's Historical Setting

During the last years of World War Two the champions of nutrition worked hard to convince world leaders that an organisation dedicated to food and agriculture was essential for post-war reconstruction. Food production needed to be increased significantly to meet the needs of the millions who were starving and coordinated action required across borders. FAO's founders, the champions of nutrition, wanted to create an international organisation with the authority and finances to change the ailing system of food production and distribution to enable everyone to access a nutritious diet. It was hoped that a well fed

population and optimally functioning food system would be able to lift the world economy and drive development for everyone's benefit.

FAO was established at the Quebec Conference as part of the wider UN system and in addition to the restructuring of the economic landscape through the creation of the Bretton Woods institutions, most notably the IMF and the World Bank. As such, despite the desire of the founders of FAO for a regulatory organisation, FAO had to operate in a system that had been established by the victors in the war, the strongest and most influential of which was the US, who wanted the system to operate in line with their own ideology; regulated capitalism (Dumenil and Levy, 2011; Kotz, 2015). This created a challenging dynamic at the centre of FAO, with the champions of nutrition, including its first director general Boyd Orr, fighting for the authority to control the production and distribution of food, especially through food surpluses, and its most influential member states, which wanted an advisory organisation that would not interfere with the global markets. Throughout the 1960s technology was seen as the panacea to provide food security, however these technological fixes promoted through the 'green revolution' created their own problems and were delivered as part of a system established by the richest countries and operated in such a way as to promote industrial agriculture and maintain the status quo.

This system of regulated capitalism did allow for state intervention through tariffs and control over capital but it was also used to limit the authority of FAO. Each

of the first directors general, Boyd Orr, Dodd and Sen, had their plans for control over surplus grains thwarted. By the early 1970s the Bretton Woods economic system was at breaking point and there were a number of challenges to the food system, from droughts causing bad harvests to the green revolution starting to plateau, and the oil price rises to the population increases; none of which FAO was in a position to control. However, despite its lack of culpability FAO's response to the situation was seen as lacking.

The 1970s was a decade of political and economic upheaval, which created the conditions for the emergence of a new type of capitalism, neoliberalism. Through the implementation of SAPs in the 1980s and 1990s, with reduced state support for agriculture, increased market liberalisation and greater privatisation, these policies increased food insecurity and through the promotion of industrial agriculture the many social and environmental problems continued to develop.

FAO was struggling to operate in this system, which was becoming increasingly fragmented and globalised. A wide range of actors, including private foundations and multinational corporations, were exerting increasing influence within the sphere of food and agriculture but were also beyond the influence of FAO. These well-financed private actors were also promoting industrial agriculture and the neoliberal agenda. In addition to the private foundations and multinational corporations the millions of small-scale farmers were themselves

joining forces to allow themselves greater influence within the global system. Organisations such as La Via Campesina challenged FAO to reject the neoliberal policies promoted by many of its member states and these private actors. In this complex arena FAO had to re-establish its central position or risk becoming irrelevant. Reform was essential.

By conducting a historical analysis of FAO this thesis has been able to trace the organisation's origins and development through the changing political, economic and social dynamics of the international system. At the end of World War Two there was an optimism that an organisation created to oversee the production and distribution of food on a global scale would be in a position to create a fairer world. Those who advocated a regulatory organisation were seeking to move the focus from national state interests to one in which the epistemic community would have more authority to act and to steer global policy through FAO.

However, this aim was to be thwarted. Even between the Hot Springs Conference, at which the epistemic community set out its aims, and the Quebec Conference, at which FAO was established, there had been a dilution of its remit. Krasner (1993) argues that regimes are distributors of power and interests, through which the players and game rules are decided by those in power. In the post war world the victors were undoubtedly the most powerful players, and thus the US and Britain, ensured FAO did not possess too much authority; they limited its remit at the moment of its creation.

Throughout FAO's early development attempts by the organisation's directors general were repeatedly unsuccessful as states rebuffed all threats to their sovereignty. Arguably since the 1970s FAO's directors general have accepted the more limited nature of the organisation's work; concentrating more attention on its technical and advisory roles. Although this may have been seen as a disappointment by its founders; a restraint on FAO's potential, it is still a vital role to play within the international system, and one for which FAO is uniquely equipped.

The importance of information and the communities that provide it is not inconsequential. This becomes even more significant as decision makers are forced to deal with a broader range of issues, which are interconnected in a myriad of ways creating a complexity previously unknown. Haas (1992, p.2) argues that this complexity has undermined the arguments put forward by conventional approaches to international relations that "presume that a state's self-interests are clear and that the ways in which its interests may be most efficaciously pursued are equally clear."

In the twenty-first century there are now even greater levels of uncertainty for decision makers; of consequences of their actions that may not be known for generations, such as responses to climate change and different methods of food production. This uncertainty places even more emphasis on those epistemic

communities able to provide the information that will help states identify their interests, frame the issues for collective debate, propose specific policies and identify relevant points for negotiation. This is the vital role played by FAO. Haas (1992, pp.2-3) argues that “control over knowledge and information is an important dimension of power and that the diffusion of new ideas and information can lead to new patterns of behaviour and prove to be an important determinant of international policy co-ordination.”

FAO may not have become the authoritative organisation that its founders, the champions of nutrition, hoped for but its role is important nonetheless. FAO has faced a number of challenges, even as an advisory organisation, in the last seven decades. However, in recent years its reform and the renewed vision imbued by the new director general have brought it closer to the founders’ vision for an organisation able to play a vital role in combating worldwide hunger.

FAO’s Reform

The need for reform had become urgent as the organisation struggled to fulfil its mandate as its budgets and staff levels were forced into decline, the enormity and complexity of the challenges of global food insecurity increased and member states failed to reach consensus on a number of important but contentious issues. The FAO Council agreed to launch the IEE, the most in-depth and comprehensive evaluation in the history of the organisation. Its report, published in 2007, acknowledged the world’s need for FAO but called for extensive reform of the whole organisation, from its headquarters in Rome and

throughout all its field operations. Despite a slow start to the reform process the pace of change was increased significantly following the appointment of the new director Jose Graziano da Silva in 2012.

As part of the reform process FAO's global goals have been updated to reflect the overall aim of eradicating hunger. Its strategic goals have been streamlined, its bureaucratic structure overhauled and the management of its human resources, restructured from headquarters to the field, as part of the organisation's transformational change designed to enable FAO to tackle the present and emerging challenges in the food system. It is hoped that, if successful, this reform will have moved FAO from a position of near irrelevancy to one of trailblazer, leading the way in organisational reform.

FAO's provision of GPGs

GPGs theory was investigated to ascertain its suitability to address the role of FAO within the food and agriculture arena. An examination of the theory from Samuelson's public goods theory to that put forward by Kaul and her colleagues for the global sphere showed that GPGs theory was ideal for the purposes of this thesis.

FAO plays an important role in the provision of GPGs. As a specialised agency of the UN with a clear mandate and global reach it is in a better position than any other organisation to provide the GPGs in the areas within its remit. All the GPGs discussed in this thesis are vital individual components in the on-going

work to create a food secure world; taken together they offer a suite of tools to tackle the complex challenges faced in the twenty-first century.

The collection and dissemination of data, through the organisation's measurement role, is crucial as it facilitates well-informed debate. By addressing all issues related to food and agriculture, many of which are complex, interconnected and global, FAO has a broad remit. FAO is the only organisation with the capacity to provide data on all these issues and on this scale. Through this provision it has increased the level of understanding of relevant issues, which has informed policy formation and driven technical assistance, as well as gained a well-earned reputation at the forefront of the epistemic community.

This is in addition to its normative role, through its norms and standards setting, which deliver a range of GPGs available to states and non-state actors, to help formalise governance and provide a campaigning platform in areas of contention, such as genetics or land tenure. If FAO is successful in its normative work it will have helped to set the agenda and shift the focus onto broader human security issues, whilst helping to create strong networks between different actors. As such this is also part of its partnership building work.

Some of these goods are just the starting point for further negotiations and many require implementation at the country-level to have the desired impact. Political will is required to make positive change. States, as the main actors

within FAO and the international system, should be the source of this political will, especially as states are the entities that have the final decision-making prerogative, the finances and the responsibility of implementation at the country-level. Nevertheless despite the obvious need states have often displayed a lack of political will when addressing issues relating to hunger, with many competing interests taking precedence. However, with the inclusion of so many different actors the situation has become more complex.

For example, by bringing CSOs into the CFS negotiations there are now many more voices heard; including those most affected by the policies agreed. This adds authenticity and legitimacy to the process. It also creates a new dynamic during the negotiations as states have to consider different viewpoints at every stage, as well as during implementation. CSOs with an in-depth knowledge and understanding of the policies are in a better position to judge the level of success of their implementation. The CSOs share partial responsibility for the policies as they have been part of the negotiation process; they also represent those most keenly affected by the policies and so have a greater interest in the policies' success. If the policies do not deliver the desired results, or the states do not implement them correctly, the CSOs are in a better position to challenge the states at all levels, nationally, in the CFS itself, or globally through their networks and by using the media. This has been made even easier for the CSOs through the formalisation of their networks with the creation of the CSM. States may still occupy their central position within FAO but with the inclusion of

a wide range of non-state actors states may face more challenges to their authority.

As CSOs develop their levels of expertise through their involvement in the different negotiations they are becoming part of the epistemic community; not only gaining greater understanding from the information already available but by also adding their knowledge and experience to the wider knowledge pool. Information is being provided through the official channels within FAO, for example through the provision of statistics and publications and the work of the HLPE, but also through the experiences of different groups, such as small-scale farmers. The pool of legitimate sources of information has been widened. This has also been seen through the engagement of millions of people as part of the SDG framework consultation.

Cognitivists recognised that not all opinions carry the same level of authority. Those who responded to the My World survey do not possess authority as individuals however as a body of millions their voice should be heard. Members of civil society who are small-scale farmers have added legitimacy as they have first-hand experience and many of the CSOs have in-depth knowledge of the issues. By including more voices the debate has changed. Rather than a state-centric, state security based argument, as seen by the realists and neo-realists, different elements of human security have emerged as important. This is evident in FAO's strengthened global goals and its strategic objectives; human security

has been given a higher priority than large business interests and profit. There is a shift away from the market-driven neoliberal agenda towards a more holistic human security framework that addresses many different aspects of food security from tackling rural poverty to promoting sustainable agriculture.

In addition by refocusing its global goals with an overall aim to eradicate hunger instead of just reduce it FAO is sending a clear signal to its member states that hunger should not be tolerated anywhere and that means that every state has to work to end hunger within its borders. Arguably this has been designed to inspire action and promote partnerships. The overarching objective is to end hunger but FAO cannot do that by itself; only through partnerships can all the challenges be addressed.

The potential of FAO to provide GPGs in the future

The goal of creating a food secure world is ambitious; it is also beyond the reach of any single organisation. To achieve food security all actors within the food and agriculture system will have to work together, from states to farmers, and international organisations to NGOs, with the goal of food security kept firmly at the forefront of all decision-making processes. Agriculture has the capacity to produce not just food but also a wide range of public goods or bads. To deliver food security now and for future generations, whilst protecting the natural systems on which the world relies, sustainable agriculture has to be promoted instead of industrial agriculture, which is detrimental to people and the

planet in so many different ways. If food is produced in a sustainable manner agriculture has the potential to provide many different GPGs.

FAO is in an ideal position to assist the different actors within the international system to ensure agriculture provides these GPGs. It can achieve this through providing its own GPGs, especially through its three main roles. By measuring the many complex issues in the arena of food and agriculture, setting the agenda, informing the debate and bringing the different actors together, providing a space within which to debate and form policy, as well as facilitating the creation and maintenance of working partnerships FAO is playing a vital role in helping to provide a food secure world.

FAO has always provided GPGs and it continues to demonstrate its ability to do so. However, it has to become more efficient and targeted in its approach. By becoming a more focussed and flexible organisation, by inviting more actors into negotiations and by establishing partnerships it will be in a better position to deliver GPGs more effectively to make a significant contribution. Through its reform, revised global goals and streamlined strategic objectives it should be in a better position to fulfil its remit and to provide GPGs. It is too early to ascertain how successful this reform has been.

Nevertheless there have already been a number of positive changes. For example, with the extension of the epistemic community and the inclusion of

more non-state actors member states will have to recognise the fact that although they continue to be the main actors they are now not the only actors with vested interests in the outcome of negotiations, debates and agreements. More people now have a voice; including the hungry.

The future potential of FAO to provide GPGs will depend on the partnerships that it helps to build and maintain. It will also depend on its ability to persuade all actors of the need for GPGs, its suitability as the best provider of such goods and consensus on the goods' scope and financing. It has been successful in persuading its member states of the importance of its GPGs' provision in regards to its three main roles, for this support to continue it needs to provide them to a high standard to ensure it receives sufficient funding.

Through its three main roles FAO is in an ideal position to not only provide a range of valuable GPGs, but to also offer an alternative to neoliberalism. With a wider holistic perspective across state borders and across generations GPGs are far removed from the narrow and immediate considerations of monetary gains. In addition their non-excludability and non-rivalrous aspects are in direct opposition to the financialisation and privatisation promoted through neoliberalism. Through the provision of these GPGs FAO aims to deliver action on its strengthened global goals, which are also ideologically opposed to the neoliberal agenda and instead rooted in the common cause of humanity. By

helping to promote sustainable agriculture FAO will be able to play an important role in ensuring food security for this and future generations.

Therefore, in answer to the three research questions outlined in this thesis; FAO is in an ideal position to provide a range of GPGs that will be instrumental in the provision of a food secure world. However, it cannot do this alone, but only as part of a network of organisations and individuals. Nevertheless, following its extensive reform it is in a stronger position to provide these GPGs and to take the lead in the eradication of hunger and in so doing it will offer an alternative to the predominant ideology, neoliberalism.

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Appendix One: Interviewees

Interviews conducted June 2013 in Rome

Olaf Thieme, Livestock Development (FAO)

Erwin Northoff, News Co-ordinator (FAO)

Tina Farmer, Editor Communications and Publications, Fisheries and Aquaculture Department (FAO)

Josef Schmidhuber, Deputy Director, Statistics Division, Economic and Social Development Department (FAO)

Carlo Catiero, Senior Statistician/Economist, Food Security Statistics and Analysis Statistics Division (ESS), Economic and Social Development Department (FAO)

Nick Rubery, Design and Information, Information Division (FAO)

Andrew MacMillan, author and former Director of FAO's Field Operations Division

Richard Trenchard, Senior Advisor, Office of the Deputy Director-General (Operations) (FAO)

Kimberley Sullivan, Natural Resources Department (FAO)

Thomas Price, Senior Officer, Agricultural Innovation and Society, Global Forum on Agricultural Research Secretariat

Yukio Yukoi, Director of Plant Production and Protection Division (AGPM) (FAO)

Michael Clark, Special Advisor on International Governance (FAO)

Appendix Two: Abbreviations

ABCD	Archer Daniels Midland (ADM), Bunge, Cargill, Louis Dreyfus
AGRA	Alliance for a Green Revolution in Africa
AMIS	Agricultural Market Information Service
AoA	Agreement on Agriculture
CBDR	Common but Differentiated Responsibilities
CFA	Comprehensive Framework for Action
CFS	Committee on World Food Security
CoC-IEE	Committee on Follow-up to the Independent External Evaluation
CSM	Civil Society Mechanism
CSO	Civil Society Organisation
DAC	Development Assistance Committee
EU	European Union
FAO	Food and Agriculture Organisation
GCC	Gulf Cooperation Council
GPG	Global Public Good
HLPE	High Level Panel of Experts
HLTF	High Level Task Force on Global Food and Nutrition Security
IAASTD	International Assessment of Agricultural Science and Technology for Development
IEE	Independent External Examination
IFAD	International Fund for Agricultural Development

IFI	International Financial Institution
IFPRI	International Food Policy Research Institute
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
MDG	Millennium Development Goal
NAFTA	North American Free Trade Agreement
NGO	Non-governmental Organisation
OECD	Organisation for Economic Co-operation and Development
OWG	Open Working Group
PWC	Post Washington Consensus
PRSP	Poverty Reduction Strategy Paper
SAP	Structural Adjustment Programme
SDG	Sustainable Development Goal
SSA	Sub-Saharan Africa
UN	United Nations
US	United States
USSR	Union of Soviet Socialist Republics
WDM	World Development Movement
WFP	World Food Programme
WTO	World Trade Organisation